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GAZETTEER
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VOLUME X.

RATNÁGIRI AND SÁVANTVÁDI.



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THE chief contributor to the Ratnágiri Account is Mr. G. W. Vidal, C.S. Mr. Vidal has, besides supplying materials for parts of the sections on Trade, Manufactures, History, Land Administration, Sub-divisions, and Places of Interest, prepared and revised the Description, Production, and Capital Chapters. For Land Administration and Places of Interest much assistance has been received from Mr. A. T. Crawford, C.S.

The bulk of the Sávantvádi Account is from a memoir written for the Bombay Gazetteer by Colonel J. F. Lester the last Political Agent.

As far as possible the names of other contributors are shown in the body of the book.

JAMES M. CAMPBELL.

August 1880.

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RATNĀGIRI.

HABSAN STE KOLABA DIST. SAVAN

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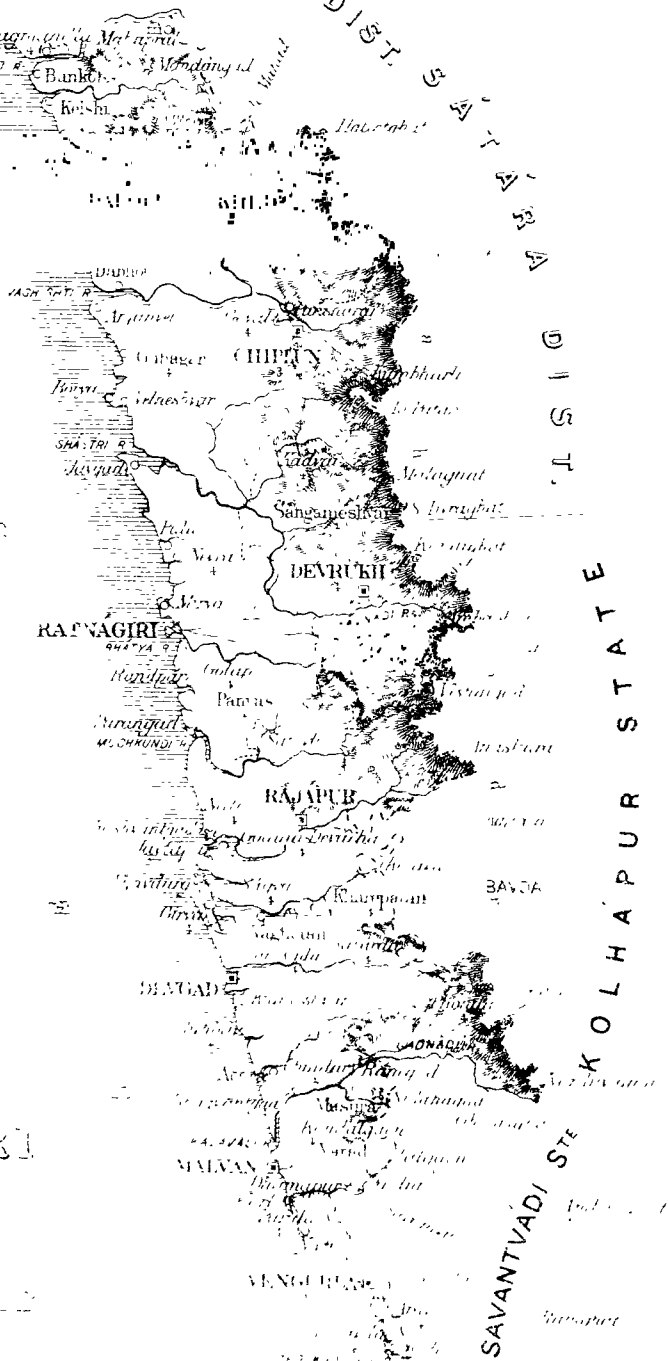
- 1. Inhabitant and Minor
- 2. Collector's Residence
- 3. Travellers In
- 4. Railway Station
- 5. Main Road
- 6. Hill Fort

- 1. Population above 10,000
- 2. " " between 5,000 & 10,000
- 3. " " between 2,500 & 5,000
- 4. " " between 1,000 & 2,500

RATNAGIRI

Scale 1:100,000

10 20 30 40 50 60 70 80 90 100



RATNÁGIRI.

CHAPTER I.

DESCRIPTION¹.

THE district of Ratnágiri lying between $15^{\circ}40'$ and $18^{\circ}5'$ north latitude, and $73^{\circ}5'$ and $73^{\circ}55'$ east longitude, has an area of 3789 square miles, a population of 1,019,136 souls, and a land revenue of £101,342 (Rs. 10,13,420).²

Except for two coast villages Bágmandla and Kolmandla on its north bank, the Sávitri river for about twenty-four miles, from the coast to the old port of Mahápral, forms the northern boundary of the district, separating it from the native state of Janjira, or as it is usually called, Habsán. Leaving Mahápral the boundary follows an irregular chain of hills, that running south-east and joining the Sahyádri range at the Hátlot pass, divide Ratnágiri from the southern extremity of the Kolába district. On the west lies the Indian Ocean, giving the district a seaboard of about 160 miles, from Bánkot or Fort Victoria, to a point some two miles south of Fort Redi. On the east, the water shed of the Sahyádri hills from Hátlot to Naradva, forms a well defined natural boundary, and except for the one village of Gotna in Sangameshvar that passes beyond it, divides the district from Sátára and Kolhápúr. The southern boundary is more irregular. At the south-east corner, the Sávantvádi state comes between Ratnágiri and the Sahyádri hills, leaving Ratnágiri a narrow tongue of land that runs down the coast line, and diminishes almost to a point near Fort Terekhol, the northern limit of the Portuguese province of Goa. This narrow strip of coast, scarcely more than four miles at its broadest point, forms the Vengurla sub-division.

The area included in the district of Ratnágiri is, for administrative purposes, distributed over nine sub-divisions. These, as shown in the following summary, have an average area of 421 square miles, 148 villages, and 113,237 inhabitants.

Chapter I. Description.

Boundaries.

Sub-divisions.

¹ This chapter is contributed by Mr. G. W. Vidal, C.S., partly from materials supplied by Mr. A. K. Narne, C.S., Mr. J. H. Todd, C.S., and Mr. C. B. Winchester, C.S.

² The population figures are those of the 1872 census, the revenue is that recovered during the year ending 31st July 1879.

DISTRICTS.

Ratnágiri Administrative Details, 1879.

Chapter I.
Description.
Sub-divisions

NAME	AREA in square miles.	VILLAGES										POPULA- TION, 1872.	POPULA- TION to the square mile.	LAND REVE- NUCE, 1879	
		Government.				Alienated				Total					
		Villages.		Hamlets.		Villages.		Hamlets.		Government	Alienated.				
		Inhabit- ed	Uninhab- ited.	Inhabit- ed.	Uninhab- ited.	Inhabit- ed.	Uninhab- ited.	Inhabit- ed.	Uninhab- ited.						
															£
Dápoli	500	243½	4	903		3	11		247½	3	250½	143,137	286	14,434	
Khet	390	142	1	585		4	24		143	4	147	89,647	230	9262	
Chiplun	670	207	1	1131	1	5	41		208	5	213	164,953	246	18,830	
Sangameshvar.	533	167	7	379		12	36		174	12	186	107,891	201	12,620	
Ratnágiri	430	154	1	549		6	13		155	6	161	129,576	301	16,578	
Rájápúr	632	147	4	539		15	73		151	15	166	136,544	216	15,340	
Dergad	521	113	14	461		7	1	67	127	8	135	124,115	238	9275	
Mávan	56	55	4	261		7	3	31	59	10	69	88,185	1575	8326	
Vengurda	52	9		196		1			9	1	10	35,938	675	4677	
	3789	1237½	38	4824	1	69	4	290	1273½	64	1337½	1,019,136	269	101,342	

Aspect

The district is formed by a narrow belt of low land, lying between the Indian Ocean and the Sahyádrí hills, with a total length of about 160, and a breadth varying from thirty to forty-five miles. Though hilly and rugged as a whole, the district presents in different parts many characteristic features. Near the Sahyádrí hills the valleys are more open and the hills less rugged than towards the centre of the district, which is little else than a mass of wild rugged hills. These again, towards the coast, fall into nearly level plateaus, in great part made barren by a capping of laterite rock, cleft by deep narrow steep-sided valleys and ravines, through which rivers and streams find their way from the Sahyádrí hills to the sea. These rivers, tidal and navigable, have on their banks the chief ports and nearly all the fertile land of the southern Konkan. Over the rest of the country the soil is miserably poor, most of it a stiff iron clay, often mixed with gravel.¹

Coast Line.

The coast is almost uniformly rocky and dangerous. At sea, from a little distance, the line of black steep cliffs seems unbroken, and most uninviting. But those who in small boats or native craft creep along the coast, find, one after another, bays and coves shut in between jutting points of black rock and edged with sand of perfect whiteness. Here and there a thin sprinkling of red earth contrasts with the black rock, and though there are no trees, there is, even in the hot weather, a fair covering of green brushwood. In places, the hills draw back a little, leaving at their base a rich level of rice fields, with generally a belt of cocoanut palms between them and the beach. Almost every ten miles is a river or bay, large enough to form a safe harbour for native craft, while at least four or five are by size and position fit to be leading ports and centres of foreign trade. The promontories at the mouths of the larger rivers are usually crowned with the ruins of old fortresses, and in one or two places, as at Suvarndurg and Mávan, rocky islands, divided from the mainland by narrow channels, still show the remains of

¹ Captain Wingate, 1185, Bom. Gov. Sel. II. 6.

strong Marátha fortifications. In the numerous bays and openings along the coast are extremely picturesque villages, shaded more or less densely by palm trees, the houses usually built in one or two long narrow lines, each house standing in its own little plot of cocoanut garden.

Inland, the district is a series of raised laterite table lands with a varying depth of soil, the rock cropping out at frequent intervals. Between the table lands are valleys, the smaller ones mere beds of mountain torrents, the larger containing strips of rice land, often fringed with betelnut groves or plantain gardens, with here and there a mango or jack tree orchard. Some of these table lands, especially those some way inland, are fairly wooded. But near the coast they are barren plains strewed with stones, with an occasional patch of soil in the crevices of the rock. Except in some of the alluvial lands at the heads of creeks and in a few watered tracts mostly in the south, the crops, sown in June, are reaped in November. From November to June the land is absolutely bare. During the rainy season, a coarse rank grass grows freely on all the hill sides, but it has little value and makes poor fodder. The inland villages and hamlets lie usually in the valleys under clumps of shady mango, jack, and tamarind trees. Many of them in connection with their temples, have beautiful sacred groves, *derrát*, preserved from ancient days. In these groves no branch or stick may be cut, save for the use of the temple or of the community. Above are lofty trees overgrown with creepers, ferns, and orchids, and linked by parasites trailing in graceful festoons; below is a tangled growth of bush and scrub intersected by mazy paths, the whole a mass of luxuriant vegetation, to a lover of nature one of the pleasantest features of the district.

From all parts of the district, the line of the Sahyádrí hills bounds the eastern horizon. These mountains, both in form and size, are easily distinguished from any of the numerous spurs that roughen the surface of the district between the bases of the main range and the sea. In the Sahyádrí hills both above and below the main range, the tops are often crowned or girded by large massive basaltic rocks. These, with little aid from art, can be made fortresses most difficult to reach, and to look at, almost impregnable. Many of them have springs of the finest water, and in all a supply can be secured in cisterns or reservoirs. These hills are crossed by numerous passes, which except in two or three places where made roads have been constructed by the British Government, form the only means of communication with the Deccan. The best known of these precipitous defiles are, taking them from north to south, the Hátlot, the Ámbola, the north Tivra, the Kumbhárl, the Mala, the south Tivra, the Ámba, the Ana-skura, the Kájirdi, the Phonda, and the Nardir passes. In climbing and on gaining the crest of these passes the scenery is on all sides most grand. Mountains rise behind mountains three or four thousand feet high, and covered with trees except where the huge black rock is too solid even for the hardest shrub to take root. The hills are in places always green, and during the rainy season, especially towards its close, when torrents pour down the mountain sides, the vegetation is

Chapter I. Description.

Aspect.

Inland Tracts

Hills.

Chapter I.
Description.
 Hills.

extremely rich, and gleams of sunshine, reflected from the breaking masses of clouds, give a thousand passing tints to every hill. Both at the opening and the close of the south-west monsoon, the most tremendous tempests and thunderstorms are common. To the west of the Sahyádrí hills, which rise sheer from base to crest, the country is comparatively low, the plateaus seldom rising more than five hundred feet above sea level. So rugged and hilly is the whole district, that no detailed account of its innumerable spurs and eminences is possible. The lower hills are for the most part bare and treeless, and where trees occur, they are yearly stripped of their leaves and branches to be turned to ashes on the rice fields in the valleys below. Only here and there are lofty hills with slopes more or less covered with verdure. A few of these deserve special mention. Beginning from the north, the first hill of importance is the hog-backed Mandangad, a ruined fort, about fourteen miles from the sea in Dápoli, which, commanding a view of Mahábaleshvar, is itself a conspicuous land-mark for many miles round. South-east of Mandangad lies Pálgad, also in Dápoli. Further on, in the same direction and in the Khed sub-division, three isolated hills of considerable height rise in a line parallel to the Sahyádris and separated from them by the narrow valley of the Tagbudi river. The northmost of these hills is Mahipatgad, which faces the Hátlot pass and Makarandgad in the Sátára district the famous 'Saddle back' of visitors to Mahábaleshvar; the central is Sumárgad, and the southmost facing the Ámbolighát is Rasálgad. All these hills are capped by strong perpendicular scarps of basalt, and two at least of them were, like all similar coigns of vantage, fortified by the Maráthás. Except the Sahyádrí ranges, there are no hills of any great height either in Chiplun, Sangameshvar, or Ratnágiri. Passing south to Lánja in Rajápur, Máchál a triangular hill of considerable height is seen close to the old fort of Vishálgad, at the foot of, though detached from, the Sahyádris. Unlike most high Ratnágiri hills whose tops are narrow ridges or peaks, Máchál ends in a fine broad plateau and could be made a sanitarium. The following table prepared from the Trigonometrical Survey Chart shows the heights and positions of some of the principal points from which observations were taken during the survey:

Ratnágiri Hills.

NAME.	SUB-DIVISION.	NORTH LATITUDE.	EAST LONGITUDE.	HEIGHT IN FEET.	SITUATION
Kánta . . .	Dápoli ..	17 57 30	73 7 40	1190	Hill on table land, 4 miles south-east of Bankot
Nagadi	" ..	17 42 10	73 13 37	952	Highest point of range of hills, about 4 miles south of Dápoli camp and 3 miles from the coast.
Bhuleshvar .	Khed .	17 45 8	73 22 22	906	Hill, 4 mile north-east of Faras village, between Dápoli and Khed, about 13 miles from the coast
Adur ...	Chiplun	17 24 9	73 12 41	952	A conspicuous hill known as Borya Head on the sea coast, about 12 miles south of Dabhol

RATNÁGIRI.

*Ratnágiri Hills—continued.*Chapter I.
Description.
Hills.

NAME.	SUB-DIVISION.	NORTH LATITUDE.	EAST LONGITUDE.	HEIGHT IN FEET.	SITUATION.
Kumbhárli ..	Chiplun ...	17 24 8	73 43 26	3435	Sahyádrí range, $\frac{1}{2}$ mile north of the Kumbharli pass.
Jaygad	Ratnágiri	17 17 55	73 15 47	199	Highest tower of the fort.
Kaljondi ...		17 12 23	73 20 32	729	Highest point of a range of hills, 2 miles east of the village of Kaljondi and 6 miles from the coast.
Varavda ...	" ...	17 11 48	73 16 32	218	Hill south-west of the village of Varavda on the sea coast, about 2 miles north of Málkund.
Mirya ...	" ...	17 1 34	73 19 6	464	Highest point of hill $2\frac{1}{2}$ miles north of Ratnágiri fort.
Ratnágiri Fort.	" ..	16 59 9	73 18 49	293	Light-house tower.
Nivendi ...	" ..	17 9 47	73 21 32	729	Hill to the east of the village of same name, about 6 miles from the coast.
Tili Tek...	" ...	16 50 35	73 20 21	397	Ridge of hills on sea coast, about 12 miles south of Ratnágiri.
Khávdí ...	Rájápur ...	16 48 35	73 31 50	...	Hill about a mile west of village of same name near Lánja, about 13 miles from the coast.
Manoli ..	" ...	16 55 11	73 50 30	3343	Western extremity of ridge running east and west about 4 miles south of the Ámba pass.
Gheria ...	Devgad ...	16 29 57	73 22 28	319	Hill on coast three miles south of Vijaydurg fort.
Bhutoba ..	" ...	16 15 26	73 23 13	367	Hill on sea coast about 16 miles south of Vijaydurg.
Shrávan...	" ..	16 14 33	73 36 42	695	Hill about 2 miles north-west of village of same name, about 9 miles from the coast.
Velvan ...	" ...	16 25 2	73 54 18	3240	Highest point of hills, a mile and a half east of Sivgad fort.
Parula ...	Málvan ..	15 58 14	73 36 42	517	Hill in village of same name, eight miles north of Vengurla.

The numerous streams and watercourses, which form the river system of the district, vary little in the character of their course. Rising either in the Sahyádrí hills, or in the various spurs connected with them, they traverse the country through narrow deeply cut ravines, and deliver their tribute wave to the Indian Ocean after a short but tortuous course, seldom of more than forty miles. The general flow is from east to west, with in some instances a slight tendency to fall towards the south. A noticeable feature of these rivers is the suddenness of their windings. In many parts they have the appearance of land-locked lakes, until the passing of an outstanding hill shows the line of water stretching at right angles to its former channel. Though of comparatively small size and volume, and ill suited for irrigation, the principal rivers are of great value to the district. Their deep tidal channels, navigable for twenty miles or more, when supplemented by good roads between the sea-board and the Deccan, afford easy means of communication, and provide an outlet for the produce of the country; their broad estuaries offer good and safe anchorage for craft plying up and down

Rivers.

Chapter I. Description.

Rivers.

The Sávitri.

the coast ; and along their low tidal banks are found the best rice lands of the district. Besides the larger rivers, there are many small streams, creeks, and inlets, which have no communication with the interior. And during the south-west monsoon innumerable little rills and rivulets springing up in all directions, drain into minute patches of level ground and convert them into rice fields.

The Sávitri or Bánkot river, for its last twenty-four miles the northern boundary of the collectorate, is one of the five streams, *panch ganga*, which have their sources in the village of old Mahábaleshvar. Descending the mountain side in a narrow rocky channel, it passes by Mahád and Dásgaon through southern Kolába, and reaches the Ratnágiri district at Mahápral, and after a total course of about fifty miles falls into the sea at Bánkot. During its passage through the Ratnágiri district, it receives the waters of no tributary. The mouth of the Sávitri is formed by bluff hills, jutting out on either side of the creek into the sea. Fort Victoria or Bánkot crowns the southern headland. The old fort is still there, though in ruins, and on the shores of the creek are traces of the first English Residency in the southern Konkan. Bánkot¹ is only a fair-weather port. The passage is marked by buoys and beacons, but a rather formidable sand bar with at low water a depth of 2½ fathoms lies across the entrance to the anchorage. In 1853, at the end of the stormy season, a native vessel containing the wife, child, and servants of a member of the Bombay Council was wrecked off this bar, and perhaps without sufficient reason, it has ever since been considered dangerous.² The river is, for native craft, drawing seven feet of water, navigable thirty-six miles to the town of Mahád in Kolába ; and for vessels of sixteen feet draught up to Mahápral in Ratnágiri, about twenty-four miles from the mouth of the river. Between Bánkot and Mahápral there is no difficulty, and large craft work up on a single tide. Between Mahápral and Mahád the river narrows ; shoals, and rocky ledges, and reefs are numerous ; and even for small craft, navigation is both difficult and dangerous. Such craft are often three or four days working up from Mahápral to Mahád. Every year within these limits the creek is silting and becoming more difficult. The principal ferry across the Sávitri is between Bánkot and Bágmandla. Boats also ply between Shipola, Panderi, Nigadi, and Mahápral, and the villages opposite to them in the Habshi's territory. After the first two or three miles, the scenery of the creek is particularly striking. The hill, rising boldly from the water's edge to a considerable height, are especially on the northern bank, clad with thick forests, which on some of the reaches surround the water on all sides, giving the creek the appearance of a mountain lake. Further inland, the hills draw back, giving place to broad belts of low land, divided from the water by mangrove swamps, and before Mahád is reached, the banks have become flat and uninteresting.

The Váshishti.

The course of the Váshishti is parallel to, and about thirty miles south of, the Sávitri. This river, the largest and most important in

¹ Mr. Crawford's Report, 4430, 12th December 1877.

² Mr. Crawford's Report, 4430, 12th December 1877.

the district, rises in the Tivra pass and takes its name from Vashisht, a follower of Rám, who is supposed to have inhabited that region. About fifteen miles from its source, after a rapid fall through rocky ravines, the river reaches the town and cotton mart of Chiplun, and at this point becomes tidal. Passing the island of Govalkot it suddenly widens, and after a course of twenty-five miles through low mud banks fringed with mangroves, it reaches the sea at the port of Anjanvel. Like the Sávitri the entrance to the Váshishti is guarded by a formidable sand bar, which on the south bank leaves but a narrow passage, under the rocky headland on which stands the old fort of Anjanvel. On the north bank, a mile above Anjanvel lies the once famous port of Dábhól. Situated on a narrow strip of low ground between the creek and a precipitous hill, its present aspect does not suggest its former greatness. When gales from the north-west make the anchorage off Anjanvel fort dangerous, the numerous craft waiting to leave the river, lie off the Dábhól shore, where they are completely protected from the wind, and where there is sufficient water to float vessels of much heavier burthen than ever now enter the Váshishti. Still, neither Anjanvel nor Dábhól is more than a fair-weather port. The Jagbudi, the principal tributary of the Váshishti, rises near the Hátlot pass. In its first twelve miles its course lies from north to south. Here it turns at a right angle, and after twelve miles from east to west, reaches the town of Khed, the head-quarters of the sub-division of that name. It here meets the tidal wave and again turning sharply, continues its course for another twelve miles from north to south, till from the right it joins the Váshishti, about twenty miles from the coast. Several smaller tributary streams are, on either bank, received into the Váshishti. Up the larger of these the tide runs for some distance, and the smaller coasting boats can pass to villages a mile or two from the main river. The entrances to these smaller creeks are generally hidden by mud banks covered with mangroves, which bar the passage when the tide is out. The Váshishti is at any state of the tide, navigable for the largest craft as far as the village of Diva, about eight miles below Govalkot, the landing place for Chiplun. Very large craft work up on the tide to Govalkot itself, twenty-eight miles from the mouth of the river, and there discharge on the quays, constructed in 1860 by Sir M. R. Kennedy, or into flat boats which work up the narrow tidal gullet to Chiplun, three miles further.¹ The Jagbudi is also navigable for small craft as far as Khed. The triangular island of Govalkot or Máp is formed by the division of the Váshishti into two channels at Chiplun. The northern channel, probably the original course of the river, but now passable only by small boats, forms one side of the triangle, while the base and the other side are the southern channel, which turns at an acute angle to re-join the main stream. The extreme length of the island is two miles and its breadth one mile. At the apex of the triangle is a low hill, the ruins of an old fort, which guards the approach to Chiplun. The island, formed entirely of alluvial deposit, is highly tilled. About a mile below Govalkot is a group of small islands of salt marsh and mangrove swamps.

Chapter I. Description.

Rivers.
The Váshishti.

Chapter I.
Description.

Rivers.
The Shástri.

There are two chief ferries across the Váshishti, between Taribandar and Dábhól, and between Maldoli and Hodkhád. The river becomes fordable at the eastern angle of the Govalkot island.

The next river of importance is the Shástri. Rising in the Sahyádri hills near Prachitgad, after a total course of about forty miles it falls into the ocean at Jaygad, a rocky promontory jutting into the sea twenty miles south of the estuary of the Váshishti. Flowing for about sixteen miles west, past the town of Sangameshvar, until it meets the Báv river at Phangas in the Ratnágiri sub-division, the course for a few miles changes abruptly to the north, and then takes a north-westerly direction to the coast. The tidal wave reaches as far as Pet, the modern Sangameshvar, two miles lower down the south bank of the river than the original town of that name. During its course several small rivers unite with the Shástri. The principal of these is the Báy, which, rising in the Sahyádri range near the Ámba pass, after a course of about thirty-five miles through a comparatively fertile valley, joins the Shástri on its left bank at Phangas about twenty miles from the coast. The Gadnadi from the Mala pass, meets the Shástri on its right bank, five miles lower down, while a smaller stream rising near Velamb in the Chiplun sub-division joins the Gadnadi on its right bank, two miles above the junction of the latter with the Shástri. Jaygad, at the mouth of the river, is a good and safe fair weather port, with a broader estuary and a less difficult bar than the Sávitrí or Váshishti. But the river soon narrows and shallows, and though vessels of moderate draught can still run up on the tide within a few miles of Sangameshvar, the channel is said to be gradually silting. The Gadnadi is navigable for small craft as far as Mákhjan, the seat of a small trade. But the Báv very soon becomes too shallow for any but small boats. There are four chief public ferries across the Shástri, between Tavsal and Láiegan; between Támbhári and Kudli; between Phangas and Dingni; and between Sangameshvar and Asurda. The Báv is crossed by ferries as Vándri and Parchuri.

The Ratnágiri.

About twenty-five miles south of the Shástri lies the Ratnágiri river or creek, with no special name and comparatively unimportant. Rising in the Ámba pass, it falls into the sea after a course of some forty miles. The mouth of the river is very narrow, and on the south side is guarded by a large sand bank. Outside the entrance and to the north, with a light-house at its extreme end, lies the promontory on which stands the fort of Ratnágiri. As this bay gives safe anchorage for small craft during the north-west winds, few vessels pass into the narrow creek. There are no important towns on its banks. But small craft can work up on the tide twelve miles as far as Harchiri. Up to this point the influence of the tide is ordinarily felt. But in the monsoon freshes, even at the very mouth of the river, the water has no taste of salt. There are two chief ferries, one between Ratnágiri and Bháta; the other between Someshvar and Pomendi.

The Muchkundi.

About twelve miles south of Ratnágiri is another small river, the Muchkundi, which rises at Máchál¹ near Prabhavli, and flows into the sea with the fort of Purangad on its northern bank. Small craft navigate the river twelve miles as far as Sátavli.

¹ The cave at Máchál is the traditional home of the sage Muchkund after whom the river is named.

The next river, the Jaytápúr creek, rising in the Anaskura pass, after about twenty-five miles as a mountain stream, reaches the ancient trading town of Rájápúr, where, in years gone by, the English and French had factories. Here it meets the tidal wave, and after another fifteen miles reaches the ocean at Yashvantgad, a promontory on its north bank about twelve miles south of Purangad. Yashvantgad is a fair weather port and the creek is navigable to within three miles of Rájápúr. The entrance under Yashvantgad is narrow; but a mile or so further up, the river suddenly broadens into what at first sight seems a large landlocked salt lake, with an island in its centre, opposite Jaytápúr. After passing this island the channel turns sharp to the south for two miles, when by a gradual curve it resumes its easterly direction. The principal ferries across this creek are two, between Yashvantgad and Jaytápúr, and between Jaytápúr and Náta. The Rájápúr bay, as it is called, affords shelter from the north-westers which blow during the fair season, but with westerly winds there is a heavy short swell in the bay, which makes it a not very safe anchorage; at that time the north side of the bay should be resorted to. There are only seven or eight feet of water on the bar at low tide. But further in are depths of from eighteen to twenty-four feet abreast the large village of Jaytápúr, inside on the left bank of the river.¹

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The Jaytápúr Creek.

Four miles south of Yashvantgad is the mouth of the Vijaydurg creek or Vágotna river. Rising in the Kájirda pass and flowing south-east for about fifteen miles, receiving on its way the waters of several smaller streams, this river reaches the tidal wave at or near Khárepátan. After this point its channel rapidly widens, and passing the quay of Vágotna on its left bank, reaches the ocean at Vijaydurg, a bold headland on the south side of the estuary, crowned by the ruins of an old fort. The mouth of the river is by the promontory of Vijaydurg completely sheltered from the south-west, and being split into several bays and backwaters, gives, all the year round, a splendid anchorage to craft of large size.² This river has no bar. At its entrance between Vijaydurg fort and the high cliffs to the north-east on which there is an old Marátha battery, there are depths of from twenty to twenty-four feet at low water. Inside it rapidly shoals, and $2\frac{1}{2}$ cables further in the depth at low water is only from twelve to thirteen feet.³ After rounding Vijaydurg, the channel turns south-east for four miles parallel

The Vijaydurg Creek.

¹ Hydrographic Notice No. 17 by Lieut. F. W. Jarrad, R.N., 7.

² In the fine season vessels may anchor anywhere in the harbour, the best position being in $3\frac{1}{2}$ fathoms mud and clay, at low water, with the extremes of the fort bearing from W.S.W. to S.W. Further in the water shoals quickly, but vessels of less than twelve feet draught can enter the river at any time, and lie in perfectly smooth water a cable from the shore abreast the landing place. A long ship should be moored head and stern, with the best bower to ebb, which in the freshets runs at the rate of nearly four knots an hour. The harbour is accessible and affords perfect shelter to vessels during the south-west monsoon, in the height of which steamers of the Indian navy conveyed troops there during the 1857 mutinies. It is high water, full and change, of the moon at 10 hours 37 minutes; mean springs rise 6 feet 9 inches, neaps 4 feet 10 inches. Hydrographic Notice, 17, 6.

³ Ibid, 6.

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to the line of coast, and then passing a small island in mid-channel, gradually curves to the east. At the bend of the river a large backwater runs south for two or three miles, forming the peninsula of Gheria. The creek is navigable for vessels drawing seven feet as far as the village of Vágotna, where quays have been built, and for smaller craft, up to Khárepátan twenty miles inland. The chief public ferry is between Vágotna and Kumbhavda.

The Devgad.

The Devgad river rises in the Sivgad pass, and after a comparatively straight course of about thirty-five miles from east to west reaches the sea at the fort of Devgad which forms the southern headland about twelve miles south of Vijaydurg. There are no towns of any importance on its banks. Several small islands have been formed in the bed of the river in its tidal section, and it is only navigable for a few miles.

The A'chra.

The Áchra, a small river taking its name from the chief town on its left bank, rises in a spur of the Sahyádrí range near the Phonda pass, and has a southwesterly course of rather less than thirty miles to the sea. The entrance to the river is narrow, and lies about fourteen miles south of Devgad. Small craft can pass as far as Áchra four miles from the mouth.

The Kálávli.

The Kálávli rises in the Naradva pass near Bhairugad, and for the first twenty-four miles forms the northern boundary of the Sávantvádi state. At this point it receives the waters of a tributary stream, called the Gadnadi, and taking a southwesterly course, and passing in succession Rámgaḍ on the right and Malund and Masura on the left, reaches the ocean after another twenty miles at a small bay, three miles north of Málvan. For the last four miles it flows due south, separated from the sea only by a narrow spit of land. During its course, the Kálávli receives numerous small tributary streams. But the volume of water is comparatively slender, and the river, navigable for only eight miles, has no important town on its banks. There are two chief ferries, between Masura and Bhagvantgaḍ, and between Redi and Tondoli.

*The Karli
Creek.*

The Karli river rises in the Sahyádrí hills, near Manohargad in the Sávantvádi state, and after a winding course of about thirty miles, passing Kudál on its left bank, and engulfing numerous small tributaries, reaches the Ratnágiri district and British territory at Talgaon. For the next fifteen miles, it forms the boundary between the Sávantvádi state and Ratnágiri; then flowing west for four miles it turns sharp to the south, and following the line of the coast for four miles more, is to its mouth, eight miles south of Málvan, cut off from the sea only by a wall of sand hills less than half a mile broad. Navigable for a few miles only, it has no towns of importance on its banks.

Minor Creeks.

Besides these larger rivers, numerous smaller creeks and backwaters break the coast line, but have no communication with the interior. During the fair season several of these minor creeks afford shelter to small coasting vessels and fishing smacks, and to cross all or nearly all of them, ferries are wanted.

Beginning again from the north, the first of these smaller inlets is the Kelsi creek, lying midway between Bánkot and Savarndurg. The entrance to this creek is narrow and difficult. On the north bank, a high steep brushwood-covered hill overhangs the narrow channel, while a long spit of sand and salt marsh flanks the southern bank. This creek is for some ten miles navigable for small canoes.

The Áda creek, some two miles south, is much like, but smaller than the Kelsi creek. In both of them large quantities of fish are netted.

Four miles south, lies the Anjarla creek or Jog river, important only as being the outlet for the produce of the teak forests, raised in the villages on its banks by Kánoji Angria about one hundred and fifty years ago, and still kept by Government as Imperial reserves.

Between the Jog and the Váshishti are no creeks or backwaters worth notice, and the coast line comparatively straight and regular gives little or no shelter. Between the Váshishti and the Shástri, and south of the open roadstead of Guhágar, lie two snug little bays, Pálshet and Borya, sheltered from northerly winds by projecting headlands. Between the Shástri and the Ratnágiri rivers are four minor creeks at Ganpatipula, Karyát Nevra, Ara, and Kálbádevi, all of them crossed by ferries. The Kálbádevi backwater from the Mirya bay, the stormy-season port of Ratnágiri, runs inland in two branches, one going eastwards to Majgaon and the other running four miles south to Ratnágiri. Both of these tidal creeklets are navigable. Between Ratnágiri and the Muchkundi a small creek runs up to Pávas, a town in the Ratnágiri sub-division. From this to the Devgad creek, there is nothing to notice. Between Devgad and the Áchra river, two small streams of no importance and having no local names, cross the Sálshi portion of the Devgad sub-division. At Málvan a small bay and backwater make an indifferent harbour. Between Málvan and Vengurla, where is a small creeklet, no other creek remains to be noticed. Finally at Redi, the extreme south of the district, a small river falls into the ocean.

The district contains no natural lakes and but few artificial reservoirs of any size or importance. The only reservoirs that call for notice are those at Dhámápur, Varád, and Pendur in the Málvan sub-division. Of their age or of their builders there is no record. The Dhámápur lake has an area of fifty-five acres, and a maximum depth of 37½ feet. Formed by damming a valley with an earthen bank, though the dam leaks considerably, it holds water all the year round, and shews no tendency to silt. It waters about 500 acres, forty of them garden and the rest rice land. The Pendur lake covers fifty-two acres and has a maximum depth of twelve feet. The embankment is of earth, with a masonry waste weir and sluice. It holds water only till April, when the sluice is opened, and in the bed of the lake rice is grown. It waters about eighty acres, and has silted in places. The Varád lake covers thirty acres and has a maximum depth of from nine to twelve feet. On one side it has a masonry retaining wall. Like the Pendur lake it holds

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water only till April when its bed is used for growing rice. It waters about 110 acres, and shews no sign of silting. This lake was, in 1855, repaired by Government.

The following sketch¹ of Ratnágiri geology has been compiled from the notes and maps of Mr. C. J. Wilkinson, formerly of the Geological Survey of India, who, owing to bad health, was himself unable to prepare it. The area examined by Mr. Wilkinson, extending from the southmost part of the district to about eight miles north of Ratnágiri town, and up to latitude 16° 6' north, includes the whole breadth of the district. Beyond that the eastern boundary of the surveyed area trends north-west till it strikes the Muchkundi river, about sixteen miles inland. Hence, the boundary runs north up to and along the left bank of the Báv river, till its junction with the Shástri. The whole of the area thus defined lies in the southern Konkan.

The rocks of this part of Ratnágiri belong to five groups. These, arranged in their true or descending order, are :—

I. Post Tertiary, or Recent	...	{	7 Subaërial formations and soils.
II. Upper do. ...	...	{	6 Alluvial deposits.
III. Middle or Lower Tertiary	...	{	5 Konkan laterite.
IV. Upper Secondary ...	...	{	4 Ratnágiri plant beds.
V. Azoic ...	...	{	3 Deccan trap and ironclay (laterite) series.
		{	2 Kaládgi quartzites and shales.
		{	1 Gneissic (metamorphic) series with trap and granite intrusions.

In describing these groups it will be most convenient to begin with the oldest, and consider the others in ascending order. Measured by the superficial area they cover, by far the most important is the Konkan Laterite; the next is the Deccan Trap; the Gneissic series covers the third, and the Kaládgi quartzites the fourth largest area; the remaining rocks occupy very small surfaces, and are comparatively of little importance.

Gneissic or Meta- morphic Series.

The peculiar rocks belonging to the great Gneissic or Metamorphic Series, which occurs so largely throughout the southern part of the

¹ Contributed by Mr. R. B. Foote, F.G.S., Geological Survey of India, from Notes by the late Mr. C. J. Wilkinson, formerly of the Geological Survey. When visited by Mr. Wilkinson, but little had been written about Ratnágiri geology. The earliest reference occurs in Mr. John G. Malcolmson's well known paper on the Fossils of the Eastern Portion of the Great Basaltic Districts of India, read to the Geological Society of London in 1837, where he describes his discovery of sandstones (quartzites) at A chra, north of Málvan. Mr. H. J. Carter, F.R.S., of the Bombay Medical Service (Jour. Bom. As. Soc. 1854) correlated the Ratnágiri clays with the Trávancor beds, in which Lieutenant-General Cullen had discovered supposedly eocene fossils. Mr. Carter was of opinion that the Konkan laterite was a true decomposed trap, not a detrital rock like the Trávancor laterite. Lieutenant A. Aytoun's *Geology of the Southern Konkan*, published in 1854 (Edinburgh New Philosophical Journal, New Series, IV., 671) referred chiefly to the districts south of Ratnágiri, but contained some notes on the laterite seen near that station, which he considered distinctly detrital. Mr. Wilkinson's observations have as yet been published only in brief form, in a paper drawn up by himself and published in 1871 (Geological Survey of India, IV. 44, under the title *Sketch of the Geological Structure of the Southern Konkan*): Mr. Wilkinson's more important observations were incorporated in Mr. Foote's memoir on *The Geological Features of the South Maratha Country and adjacent districts* (Geological Survey of India Vol. XII, Part I. 1877).

peninsula and forms the foundation on which all the other formations rest, are but sparingly exposed in Ratnágiri, only in the southern parts along the sea coast and in the valleys of the Ashámat river and its affluents. The prevalent strike of the beds is north-by-west to north-north-west in the band of rocks running along the coast, with which it shows a remarkable parallelism, suggesting some connection between the strike of the rocks and the run of the coast. The predominant varieties of rock in this band are mica schists and quartzites, showing a certain amount of folding parallel to the line of strike. In the upper valley of the Ashámat river, gneiss and mica schists are most common, especially at and around Ashámat village itself, but Hornblendic schist with gneiss occurs also at several places higher up the river as near Harkul and Kupavda. Tale schists are met with at, and to the north of, Bidvádi four miles west of Ashámat. In this quarter the prevalent strike of the rocks is north-west to south-east, occasionally trending to east and west. The most northerly exposure of the gneiss occurs in a small inlier, surrounded by quartzites of the Kaládgi series, at the foot of the Phonda pass. Here light-coloured gneiss, with a little silvery mica, dips south-west, at an angle of about 30° .

Kaládgi Quartzites and Shales occur in the southern Konkan, in numerous detached inliers, divided from each other by the overlying beds of the Deccan traps and the Konkan laterite. Only one of these inliers is of considerable extent. This occurs at the foot of the Phonda pass, and extends north-west some fourteen or fifteen miles, covering between eighty and 100 square miles of surface. Of the inliers, the next in size is a very irregular-shaped patch, stretching about ten miles north from the right bank of the Ashámat river, at a point, a mile east of the coast. From the two principal villages within their area, the former has been described as the Lora, the latter as the Áchra inlier. Several small inliers of quartzite lie at some distance south-east of the Áchra area, and a perfect cluster of little inliers occurs along the banks of the Khárepátan stream, north of the Lora area. At Málvan, a small patch of these Kaládgi beds juts into the sea, and the Vengurla rocks, Sindhudurg, Kavda rock, and other smaller rocks off the coast, also consist of the same hard beds. These rocks belong, unquestionably, to the Kaládgi series, as developed in the Kaládgi and Belgaum districts. The lithological characters of the rocks in both quarters are identical, and their connection is established by the line of inliers which occurs in the Deccan trap region in the valleys of the Dudh ganga, Ved ganga, and Harankasi rivers, near Váki Shengaon, and Ajra. The Kaládgi beds were formerly much more largely represented in the Konkan, but they suffered immense denudation, chiefly before the outpouring of the Deccan trap. Hundreds, if not thousands, of feet of beds were cut away, and what now remains is but a scanty ruin.

Near the Phonda pass and Lora, the members of the Kaládgi series may be well seen. They consist of white, yellow, or pink altered sandstones (quartzites, quartzite-sandstone) and shales, which lie unconformably on the upturned edges of the old gneissic rocks. In the north-west corner of the Lora sandstone area is a group of hills,

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of which one, Sálva hill, is about eight or nine hundred feet high. The arrangement of the beds in the main mass of the hill is difficult to determine, as the sides are thickly covered with detritus and brushwood ; but at the western base, shales, generally associated with this sandstone, occur, dipping slightly to the west and passing under the trap at its boundary while the summit of the hill is formed by a thick bed of sandstone pink in colour, and either horizontal or with a very slight dip westward. Other high hills and spurs on the edge of the Sahyádris are formed of sandstone lying on metamorphics, partially disclosed and capped by the same thick bed of sandstone, here dipping eastward, the two portions of the beds on the respective hills being apparently the remains of a low anticlinal axis. The intervening beds have been swept away, possibly before the trap covered the country. The first flows of trap poured into the hollows between the hills, for, at the boundary of this patch of sandstones, the trap is generally found at their bases. As the successive flows surrounded them, the highest remained islands in a trap sea. Finally, they were covered by some of the higher beds, now only seen in the scarped sides of the Sahyádris a few miles eastward. As has been mentioned, this trap has, except one or two patches, been twice denuded. The effects of this denudation on the trap, west of Sálva hill, are rather curious, for, side by side with this hill, their bases almost touching, is another hill, conical in shape, and formed entirely of successive beds of trap. Nearly of the same height they are a strong contrast, the trap hill conical and barren, the lines of flow showing black and strong ; and the sandstone hill long flatcapped and thickly wooded.

The central part of the Lora area is low. On the south side, towards Phonda, are considerable spreads of nearly bare, gritty, quartzite sandstone, much weathered on the surface. In the Lora river shales appear at one place dipping south-west at 30°. In a fresh section these are soft and argillaceous, in colour white and pink. In the river they are green and associated with quartzite bands. The country north of the Lora river is very flat and low, and covered with thick clay soil. The hills flanking the Sahyádris on the eastern side of the area are sandstone, capped by a very thick bed of the same rock. At the western base of Sálva hill shales occur, passing under the trap. The shales must be calcareous here, for at their point of contact with the trap, they are transformed into a compact, light-blue rock, like limestone in which the lines of deposition are crumpled and indistinct. This calcareous rock occurs very locally, but is highly prized as the only source of lime in the district. Other shales, externally of lilac colour, occur in rolling beds on the south side of a low range of trap hills, which pass eastward from the eastern flank of the Sálva hill group. The most northerly exposure of the Kaládgi beds appears to be at Panhala, two miles north-west of Khárepátan where there is a small sandstone inlier.

South-west of Phonda, light brown or bluish argillaceous shales underlie the low sandstone range. The shales, which are soapy to the touch, are thinly fissile, and generally, rather soft, but contain

here and there, harder and more silicious seams. In these the planes of deposition, which lie very close together, are well seen.

In the Áchra inlier the sandstones form a small range, east and south-east of the village. The hills here rise to a maximum height of about 300 feet, which exceeds that of the surrounding laterite plateau. Though other varieties are found, the rock is chiefly white and of saccharoid texture. South-west of the village, the sandstones stretch into the sea. Shales occur intercalated among the lower beds of sandstone, and are seen in the river bank sections here, and also further south at Chindurvádi. The beds dip south-westward or roll about. The same or similar beds show a few miles north of Áchra on the banks of a small river and its affluents, most at Hindla, Mitbáv, and Náringa. On the south side of the lower reach of the Ashámat river the Kaládgi rocks appear in several detached patches, the most northerly of which is a small exposure of fine-grained white or yellow altered sandstone, lying south of the village of Chunávra, and dipping north-west at an angle of 10° . Similar sandstone is seen in the stream at Masda, where it shows a north-easterly dip.

In the ravines north of the small Masura river are dark blue or slate-coloured shales, weathering light blue or nearly white. They are sometimes hard, with a conchoidal fracture, sometimes soft, and soapy to the touch. South of the river the same peaty, argillaceous shales show in several ravines, as those of the Málgaon and Chámphed streams. Near the end of the ravines they are covered by pink sandstone which is again overlaid by trap-flows and laterite. In the Kankavli patch, a little to the south-east, the pink sandstone and grey shales are both seen. At Málvan and in the islands off the coast the sandstone, or rather quartzite rock is white sometimes with spangles of golden mica. A small quartzite outlier occurs on either side of the Kudál river at Devli, a little distance from the sandspit which bends the river mouth to the south. Beds of quartzite occur at the mouth of the Pát stream near Nivti, but whether they belong to the Kaládgi series, or to the gneissic series, seems doubtful; their colour and texture point to the former, their lie, upturned at a high angle, suggests the latter. The same doubt seems to attach to the age of the quartzite, forming Redi point at the southern end of the district.

The Kaládgi rocks have been correlated, on good evidence, with the great Kadápa series of the eastern side of the peninsula, and with the Gwálior rocks in Central India.

Resting with well marked unconformity upon the Kaládgi rocks, comes the great series of Trap flows, which, over the Deccan and western India, were poured about the end of the cretaceous period. The space of time between the great denudation of the Kaládgi rocks and the outpouring of the trap was of immense duration, for the Vindhyan, a great azoic series, and the whole vast thickness of plant-bearing formations, now grouped under the title Gondwána Series, all came into existence during that interval. The

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Gondwána series represents the whole great mesozoic or secondary period below the cretaceous rocks, as known in peninsular India, and its oldest groups may be upper palæozoic, while the Vindhyan series doubtless represents a good part of the palæozoic period.

Except along the scarp of the Sahyádrí mountains, but a short length of which was surveyed by Mr. Wilkinson, the trap series is not well exposed in the Ratnágiri district. The greater part of the exposed trap belongs to the very lowest flows, and the surface of these is generally covered by thick beds of Konkan laterite. Even where cut into by the numerous rivers, valleys, and ravines, the surface of the trap is very often greatly obscured by lateritic debris of all kinds, from great fallen masses to gravel and soil.

The great trap scarp and some of the great spurs were studied by Mr. Wilkinson near the Phonda pass, up which climbs the high road from Ratnágiri to Kolhápúr. Here the Sahyádrí spurs consist entirely of trap, with lines of flow, generally, easily traceable in the main mass of the hills. The result of the irregular denudation of these beds is, that conical peaks have been left varying the otherwise even outline of the hills, and generally surmounted by sharp black joints of rock. A good example of this occurs in a spur south of Phonda, which runs west from the main range. In its peaks, portions of a thick bed of black columnar basalt are seen; the bed, of which these are outliers, being very conspicuous in the Sahyádris themselves. The lowest beds of the traps in the great spur, running west from the main range, south of Phonda are approximately of the same height as the laterite plateau of the west, under which they pass. The laterite forms a band of irregular breadth between the sea and the main trap area. The band is widest opposite the Phonda pass, where the laterite overlaps the trap on to the denuded surface of the Kaládgi beds in the Lora patch described in the last section. The trap is here covered by laterite for a distance of about twenty-six miles; but the width of the laterite band decreases rapidly to the north and still more to the south. At Kankeshvar near Devgad, the trap reaches the coast, and from the Devgad river, northward, forms the coast line, "skirting along the base of the laterite cliff overlooking the sea." This trap, black on the outside and greenish grey on fracture, has small hollows unfilled with any mineral. It contains also little patches of olivine. The flow seems to have a very slight seaward dip.

The varieties of trap exposed in the Phonda pass are thus described by Mr. Wilkinson. 'In the spur south of Phonda, up which the road passes, the lowest trap has a concretionary structure, decomposing into enormous *boulders* some three or four feet in diameter. Further up, the trap is grey and porphyritic, still preserving the concretionary structure. Then it is black in colour and more like basalt. This is associated with pinkish amygdaloid, containing quartz and zeolites, the latter principally stilbite and heulandite. About five or six hundred feet from the crest of the hill is a thick black bed of columnar basalt, very prominent and stretching for miles. Portions of this bed can also be distinguished on the spurs, forming sharp peaks.'

A variety of coarse greenish brown trap, which sometimes includes amygdaloids, was noted by Mr. Wilkinson in a ravine opening into the Kudál river, south-west of Dhámápur, about seven and a half miles east-south-east of Málvan.

No distinct point of volcanic outburst was found in the Konkan, but two or three trapdykes were noted by Mr. Wilkinson, which differ in their mineral character from the great majority of trapdykes traversing the metamorphic rocks in the country above the Sahyádris, and which seem to be more nearly akin to the Deccan traps, and may, perhaps, really belong to the same period. One of these occurs on the coast about a mile east of Nivti, north-west of Vengurla. The dyke of columnar basalt has broken through the metamorphic hard hornstones and quartzites, and for a short distance flowed over them. The age of these particular metamorphic rocks is doubtful. They may be gneissic, but they may equally well belong to the Kaládgi quartzites.

No inter-trappean formations were noted in the Konkan, nor does Mr. Wilkinson mention any iron-clay formation resulting from decomposition of the Deccan trap rocks.

Resting upon the denuded surface of the Deccan trap at Ratnágiri is a deposit of white clay, in which the remains of plants are found in the condition of lignite. This deposit may with good reason be ranked with the lignite-yielding beds discovered by the late Lieutenant-General Cullen in Trávancor. The two formations are regarded as of the same age, because of the similarity of their geographical position, and the similarity, if not identity, of their lignites and fossil resins.

Mr. Wilkinson described the plant bed at Ratnágiri as 'a thickness of a few feet of white clay seen to be resting on the trap in well and other sections, imbedding fruits, and containing thin carbonaceous seams, composed for the most part of leaves.' He adds: 'This is separated from the soft laterite above by a ferruginous band about an inch thick, having much the appearance of hæmatite. It is vesicular with quartz-filled hollows.' Mr. Carter, who thought these Ratnágiri clays identical with the Trávancor beds, mentions the occurrence of blue clays at Ratnágiri. The Trávancor beds consist of blue clays with intercalated lignites and mineral resin in olive brown earth, resting upon blue, green, gritty, argillaceous limestone, containing *Orbitolites malabarica* and shells some of which, such as *Strombus fortisi*, *Cerithium rude*, *Ranella bufo*, *Cussis sculpta*, *Voluta jugosa*, *Conus catenulatus* and *C. marginatus*, have also been found in the tertiary beds in Cutch and Sind, where they appear to belong to beds of uppermost eocene or eniocene age. Except the first, all are figured in Colonel Grant's paper on the geology of Cutch.¹ These Trávancor beds underlie the local laterite, which General Cullen considered to be the detritus of the gneissic beds that form the southern Gháts; an opinion strongly supported by

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Deccan
Trap.

Ratnágiri
Plant Beds.

¹ Trans. London Geol. Soc., Second Series, V. 289; or the re-print in Carter's Geological Papers on Western India.

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the discovery (1862) of a truly conglomeratic variety of clayey laterite at Cottayam in Trávacor. Probably, because of their imperfect preservation, the nature of the fruits and leaves has been described neither from Trávacor nor from Ratnágiri.

Further study of the infra-lateritic deposits in the Konkan is much required, and is urged upon Ratnágiri residents.

*Konkan
 Laterite.*

Of all the formations met with in the southern Konkan the remarkable argillo-ferruginous deposit known as Konkan Laterite covers the greatest surface, and most affects the appearance and character of the country. Its geographical position, strictly analogous to that of the laterite deposits of the Coromandel coast, suggests its being a sedimentary formation ; but it is a deposit that does not reveal its origin on cursory inspection ; and some observers, whose opinions merit consideration, among them Captain G. Wingate and Mr. H. J. Carter, have regarded it as the result of decomposition of trappean rocks, and, therefore, as identical in character with the Deccan iron-clay (laterite). The latest observer, Mr. Wilkinson, has not expressed any positive opinion on the subject as a whole. Probably, he took the sedimentary origin for granted, or was unaware of the controversy. What light his notes give is in favour of the sedimentary origin. Referring to this peculiar deposit, he speaks in various places of 'laterite sandstones', 'laterite conglomerates', and 'shaley laterite'. Parts of the formation are therefore clearly of sedimentary origin. No evidence is advanced in favour of the trappean hypothesis, except the lithological resemblance of the Konkan laterite to the iron-clay (laterite) of the Deccan. But the vast difference in geographical position is against the trap theory, and the lithological resemblance exists as strongly between the Konkan laterite and the Trávacor and Coromandel laterites, both of which are true sedimentary deposits in all probability of marine origin.

One very great objection to a trappean origin is that it involves an outpouring of trap, long after the close of the Deccan trap period ; and of such further outflow no other evidence exists in the Konkan. How long a time must have passed before the completion of the great plain of marine denudation on which rest the eocene plant beds of Ratnágiri and the overlying Konkan laterite, is proved by the immense thickness of trap, not less than from 2500 to 3000 feet, removed after the close of the Deccan trap period.

The laterite makes the country monotonous, forming waving and in many places flat plateaus, sheets of black slag-like rock. The laterite plateau with a general elevation of between two and three hundred feet, is, except where it is worn away and leaves a deep arable soil, bare and black with no vegetation but scanty grass and a few stunted trees. It is cut through by numerous rivers, the largest of which rise in the Sahyádris, and after flowing across a comparatively open trap country, enter the laterite by deep ravines which widen towards the sea, the rivers becoming broad tidal creeks. In these ravines, along the banks of the rivers, are villages with every

available spot of their rich alluvial soil, growing rice and other grain. At the coast, the laterite forms bluff cliffs, in the lower part of which the trap is disclosed. Speaking of the laterite at Ratnágiri, which rests upon the plant beds, Mr. Wilkinson says 'On exposure the soft laterite soil hardens rapidly. Here and along the coast it is very thick, trap showing only in deep sections, and at the base of the cliffs. East of Ratnágiri, the laterite stretches fifteen or twenty miles; beyond this, the trap hills are more irregular in outline and rise gradually towards the main range of the Sahyádris. The eastern boundary of the laterite runs west of Lánja, in a south-east direction, passing east of Rájápur to Khárepátan. About Phonda it is found nearer to the Sahyádris than in other places. In speaking of the laterite boundary, reference is made to the boundary of the plateau, which has a very constant elevation, and consists of a series of flat-topped or slightly waving hills, separated from one another by deep stream-hollowed ravines. Further east, laterite occurs in patches, many of them outliers of the great mass, but oftener at a lower level, the product of the denudation of the older laterite. These often have the appearance of true laterite, but are more generally found as gravel, sandstone, or conglomerate.' It has already been stated that at various places Mr. Wilkinson found that the laterite was locally an unquestionable sedimentary deposit. One instance of this occurs at Redi, where 'the laterite is shaley, and contains shreds of fossil wood.' Similar shaley structure was also observed at Kankeshvar, about three miles south-south-east of Devgad. Here in some places the laterite is hard and compact, and consists largely of hæmatite. 'It is, however, often white, or light pink, with hollows filled with clay.' Like the trap-flows the surface of the laterite plateau shows a gentle dip towards the sea coast.

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Laterite.

The Ratnágiri Alluvial Deposits are of two kinds, sea and river. Neither is of any extent or importance. To the sea alluvium belong the recent shell beds on the sides of the creek north of Málvan. These beds are formed of broken shells and sand stiffened into a mass. They lie some distance above the present high water mark, and have a slight westerly dip. There are similar beds at Devgad. The sand spits, by which the mouths of the Kudál and Ashámat rivers are for considerable distances bent south, must all be reckoned as sea alluvium. They are doubtless due to the prevailing northerly coast current.

*Alluvial
Deposits.*

The river alluvia are limited to the lower reaches of the several creeks, and are almost entirely obscured by wet cultivation.

Among Subaërial Formations must be reckoned the small, blown sand hills on the coast, near Málvan and Devgad, where they cover the raised beds of sea alluvium of subaërial origin, as also the various patches of pseudo-laterite rocks, before alluded to as re-consolidated from the debris of the true Konkan laterite or other older ferruginous rocks, as in the red soil formed by the decomposition of the Deccan trap at Sánkedi to the north-east of Ashámat. The soils depend almost entirely on the character of the sub-rock

*Subaërial
Formations.*

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*Water-bearing
Strata.*

by whose decomposition they have been formed. Those formed by the decay of the trappean rocks vary a good deal in colour, from blackish grey to light brown and deep red. As might be expected from the quantity of iron they contain, the laterite soils are generally red. The quartzites of the Kaládgi series give rise to sandy soils, and the shaley beds to clays. The great development of clayey soil on the Kaládgi rocks, exposed in the Lora area, is in all probability due to the decomposition of such shaley beds in low-lying positions, which give rise to swampy flats.

As regards its water supply,¹ the district may be divided lengthwise into five belts or strips: the sea coast; an inland belt of laterite eight or ten miles broad; a second ten mile belt of mixed laterite and basalt; a third belt of basalt six to eight miles wide; and fifth, the foot and spurs of the Sahyádri hills. Along the sea coast some of the largest villages, as Harnai, Guhagar, Ratnágiri, Shiroda, and Redi, stand on sandy beds. All these are supplied with drinking water from wells, fed generally by the sea, filtering through the sand. This water, though more or less brackish, is by no means unwholesome. The supply is abundant, and as almost every house has its own well, the water is preserved clean and free from surface impurities. Other coast villages, such as Dábhól, Murud, Ánjarla, Kelsi, and Velás stand on artificially or naturally reclaimed marshy lands, or on beds formed from silt gathered near the mouths of rivers. These, owing to their naturally rich soil, are thickly studded with gardens, all watered from wells, which also supply drinking water to the inhabitants. In these gardens, especially during the rainy season, every bit of cowdung, house sweepings, ashes, and filth of every kind is used as manure, and as a consequence, a great deal of organic matter finding its way into the wells, breeds fevers and other epidemics. Even in these villages pure water is usually found in springs, in the sides of the overhanging hills. The second or laterite belt, immediately behind the sea coast, is supplied with drinking water partly from wells, and partly from hillside springs. The wells are not many, and are never the sole water-supply. Except in a few tidal-creek villages, where the water is brackish, they are mostly fed by freshwater springs. The hill-side springs used for drinking are carried in open channels to the houses, and where the houses are some distance apart, the water is generally pure and good. The third, or mixed laterite and basalt belt, is mostly supplied from wells, with in a few cases the help of running springs. The supply is both abundant and wholesome. In the fourth or basalt belt, the water-supply is scanty and bad. The villages mostly depend upon *gharás* or *dabkhol*s, hollows dug in the beds of streams, lined on all sides, and covered over from above with wooden beams. Entrances made on the downstream side are, to prevent their being filled with debris, every year closed before the monsoon floods. The monsoon water-supply of these villages, drawn from the running streams, is subject to all kinds of pollution, the people using the beds of streams as latrines,

¹ From notes by Mr. J. Elphinstone, C. S., 1872.

and throwing into them all their house-sweepings. The villages in the fifth belt, immediately at the foot of the Sahyádrí hills, have in many places good wells lined with timber. In others, holes dug in the beds of streams are resorted to. But in these villages the chance of pollution is small. There are no settlements above them, and the streams bring pure rain water gathered from the hills. A statement¹ prepared in 1872, shewed that out of 1329 towns and villages, with a population of 573,876 souls, 544 villages had separate wells for the upper and lower castes: 445 villages had wells used by the higher castes only: and in 474 villages, the water of running streams, in 13 villages, pond water, and in 276 villages, water drawn from holes dug in the beds of streams, was used for drinking purposes.

Hot springs are found in various parts of the district. The line of springs runs half-way between the Sahyádrí hills and the sea, and seems to stretch both north and south of the Ratnágiri district. Three villages, two in the Dápoli sub-division and one in Rájápur, have been named Unhála from their hot springs. There are similar springs near the towns of Khed and Sangameshvar, and at the villages of Áravli and Tural in the Sangameshvar sub-division. The water of all these springs, as far as taste and smell form any test, seems strongly impregnated with sulphur. But Dr. A. Duncan, who in 1837 examined the water, came to a different conclusion. He writes 'The water of all these wells is so far as I could ascertain, to the taste both insipid and sulphury. Does this latter result from its insipidity, for I can find no trace of sulphur in it, nor of iron, nor of alkali, nor of iodine, nor of any thing? And when it has been cooled and freely exposed to the air, it becomes a pleasant, and a healthy water to drink. It would seem to be simply boiled water, yet it may contain foreign ingredients, although, with my limited means, I have been unable to discover them.'² The temperature of the water varies in different springs from 100° to almost the boiling point (212°), and at Tural the experiment of poaching an egg has been successfully performed. Cisterns have been built to enclose most of the hot springs. Dr. Duncan remarks that 'one of these wells was formerly much frequented for a variety of ailments, cutaneous, dyspeptic, and rheumatic. As a bath, the water affords a remedy of great power in several forms of rheumatism. It excites the appetite, and is therefore serviceable in some forms of dyspepsia. I have also observed cases of debility, without lesion or apparent disease beyond perhaps a want of relish for food, considerably benefited. I am less acquainted with the effects produced on cutaneous ailments, but on some of these, I infer, a bath of this sort cannot be otherwise than beneficial.' The water is still much used for bathing and washing clothes, but is not regarded by the natives as having any special sanctity. The springs appear to be perpetual, and are no doubt the remains of volcanic activity.

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Hot Springs.

¹ G. R. Genl. Dept. 2521, 26th June 1872.

² Trans. Bom. Med. and Phy. Soc. I. 259.

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**Intermittent
Springs.**

On the top of a hill about two miles from Rájápur, close above the Unhála hot spring, a curious phenomenon is from time to time observed. Certain springs, at irregular intervals but almost always during the fair season, bubble up, and suddenly and without warning overflow the rocky soil, covering a considerable area of ground. This apparent freak of nature can only be accounted for, on the hypothesis of an underground syphon forcing the water through a permeable stratum. The natives regard the phenomenon as a miracle, and believe the water to be a true stream of the sacred Ganges. According to local tradition, the springs were first observed some three hundred years ago, and up to the year 1821, continued to flow regularly every year for a month or six weeks in January or February. From that date to the present time, the phenomenon has been manifested only once in every two or three years. It occurred in February 1876; but has not since been observed. The area covered by the springs, about 3150 square yards, is surrounded by a high stone wall, and paved with stones. Fourteen cisterns of various sizes have been built to receive the water. The water invariably begins to overflow in the first of these cisterns, which holds less than a cubic foot. Within a few minutes of its first appearance, the remaining cisterns are rapidly filled. These cisterns are in no way connected with each other. Only one cistern overflows, and here the water is let off through the mouth of a cow, carved out of stone. The volume of water pouring through this outlet is estimated to have a diameter of $2\frac{1}{2}$ inches. This last cistern is said always to hold water, while the remaining cisterns run dry as soon as the springs cease to flow. During the overflow, the water bubbles up through all the interstices in the pavement, as well as through the beds of the cisterns. The spot is held in great veneration, and devout Hindus, unable to perform the journey to Benares, believe the water of these springs to be equally efficacious with that of the Ganges itself. Their awakening is hailed with joy for hundreds of miles, and it is estimated that while the supply of water lasts, about four hundred pilgrims daily visit the springs. Their history is said to be told in the *Medini Purán*. According to the local legend a Kunbi, called Gangáji Salunka, was in the habit of going regularly every year to the Vithoba temple at Pandharpur. At last he grew too old and feeble to make the journey. Working in his field on the day on which he ought to have started for Pandharpur, he was so grieved at the thought that he could no longer accomplish his cherished task, that he sat down and wept. The deity taking pity on his distress and to reward his lifelong devotion, to his unspeakable delight caused a stream of pure Ganges water to well up around him.

Climate.

The climate of the district, though moist and relaxing, is on the whole decidedly healthy. The rainfall is abundant and comparatively regular. The south-west monsoon breaks on the coast usually about the 4th of June, and the rains continue with little intermission to the middle or end of October. The average fall registered at the civil hospital Ratnágiri, for the twenty-eight years ending 1878

is 101 inches and 49 cents.¹ During this period the highest fall recorded was 165·66 inches in 1878; and the lowest 63·56 inches in 1855. The supply of rain at Ratnágiri is somewhat less than the average recorded for the whole district. The records of the several stations, where rain-gauges have been used continuously

Ratnágiri Rainfall, 1851 - 1878.

YEAR.	Inches.	Cents.
From 1851 to 1860	100	63
„ 1861 to 1870	101	23
„ 1871 to 1878	102	90
Average from 1851 to 1878 ..	101	49

for the ten years from 1868 to 1877, give, taking the rainfall of each year from the 1st May to the 30th November, a combined

Average Rainfall, 1868 - 1877.

STATION.	DISTANCE FROM THE COAST.	AVERAGE FALL.	
		Inches.	Cents.
Dápoli	About 57 miles ..	112	24
Mandangad	„ 14 „ ..	133	41
Khed	„ 20 „ ..	130	59
Chiplun	„ 25 „ ..	126	53
Sangameshvar	„ 20 „ ..	127	25
Rájapur	„ 20 „ ..	113	32
Lánja	„ 20 „ ..	126	83
Gubágar	On the coast ..	76	27
Ratnágiri	Ditto ..	88	74
Malvan	Ditto ..	73	52
Vengurla	Ditto ..	90	71
Combined average ..		109	46

was, swept up the coast with great violence. The steamer Outram foundered in the gale off Vengurla, and numerous small native craft were wrecked along the coast. The wind also caused much damage to houses on the coast, and hundreds of trees were everywhere uprooted by the storm.

Another very violent storm of a cyclonish character swept the coast on the 22nd and 23rd May 1879. Up to the hour when the

¹ Dr. F. C. Barker, M.D., Civil Surgeon, Ratnágiri. The available details for the city of Ratnágiri annual rainfall are :

Ratnágiri Rainfall, 1871 - 1878.

YEAR.	Inches.	Cents.	YEAR.	Inches.	Cents.	YEAR.	Inches.	Cents.
1871	126		1861	120	17	1870	93	37
1872	119	45	1862	103	98	1871	73	80
1873	90	16	1863	95	64	1872	84	12
1874	145	55	1864	99	66	1873	83	64
1875	65	56	1865	111	64	1874	121	60
1876	111	15	1866	106	5	1875	133	48
1877	74	84	1867	92	5	1876	68	25
1878	103	43	1868	83	32	1877	89	71
1879	86		1869	101	45	1878	165	66
1880	86	6						

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hurricane burst in its full fury, there had been no signs of its approach. Few of the numerous native vessels caught in the open sea were able to weather the storm or make safe anchorage. Many vessels were wrecked even while anchored in the ports and harbours throughout the line of coast. The list of casualties was heavy. A coasting steamer was beached to save life near Vengurla, and upwards of 150 native vessels were wrecked, with a loss of over 200 lives and about £27,500 (Rs. 2,75,000) worth of cargo.

It is noticeable that the supply of rain inland averages considerably more than on the coast, and that, as might be expected, the fall is, other conditions being equal, heavier or lighter, according as the point of observation is further from or nearer to the great Sahyádrí range, which powerfully attracts the rain clouds. Mandangá is an exception to this law. Considerably higher than any of the other inland stations, it shews a greater average though further removed from the Sahyádrí hills than Khed, Chiplun, Sangameshvar, Rájápur, or Lánja.

The humidity of the Ratnágiri station is relatively great. The average mean at 10 A.M. in 1878 was 64·75 per cent and at 4 P.M. 69·66 per cent. The climate on the sea coast and for some miles inland is very temperate, extremes of heat and cold being never felt. The following tables and chart¹ give the results of thermometer readings in the shade, taken at the civil hospital Ratnágiri, in two series, (A) from 1871 to 1876, and (B) from the 1st January 1877 to the 30th June 1878. The mean annual temperature is shewn by A to be 81° 15' and by B to be 81° 66'. According to Mr. Chambers² the annual mean is 80° 8' and the range between the greatest and least monthly means 7°.

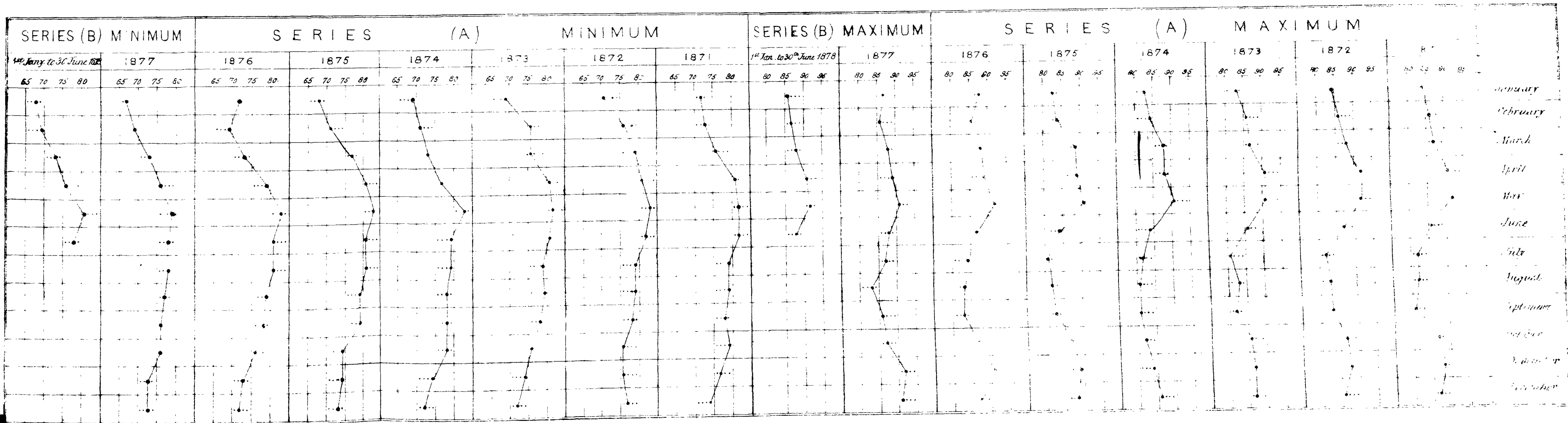
SERIES (A).

Averages taken from the monthly average temperatures of the six years ending 1876.

YEAR.	January		February		March		April		May		June	
	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.
1871	72·5	83·8	73·1	87·9	75·8	87·0	81·7	90·9	82·8	91·5	81·87	85·8
1872	70·8	84·0	70·6	85·5	77·9	88·4	80·6	91·0	81·7	91·6	82·2	88·2
1873	69·9	83·8	76·0	87·6	77·9	87·5	81·3	90·3	82·8	90·8	80·7	85·1
1874	69·4	83·8	73·2	88·8	74·4	88·9	77·4	88·7	82·0	91·3	79·7	84·7
1875	68·4	83·8	71·1	84·1	72·2	83·1	81·1	89·1	83·6	91·5	80·2	84·6
1876	72·4	88·1	68·7	85·9	73·9	87·3	79·2	89·0	81·5	92·5	81·6	89·7
Average { Maximum	84·4		87·3		88·0		89·0		91·6		85·4	
{ Minimum	70·5		71·6		75·6		80·2		83·2		81·0	
Average range	13·9		15·7		12·4		8·8		8·4		4·4	
Mean temperature	77·45		78·45		81·8		84·6		87·4		83·2	

¹ Prepared by Dr. F. C. Barker, M.D., Civil Surgeon, Ratnágiri.

² Meteorology of the Bombay Presidency, 184.



SERIES (A)—continued.

Averages taken from the monthly average temperatures of the six years ending 1876—continued.

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YEAR.	July.		August.		September.		October.		November.		December.	
	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.
1871	79.9	82.6	79.9	82.6	77.3	81.9	78.4	87.1	77.4	88.0	74.4	87.5
1872	79.3	81.7	79.2	83.2	73.3	83.4	76.6	86.9	75.7	85.4	77.5	86.5
1873	79.9	81.4	79.5	83.1	73.0	82.9	75.0	87.8	74.5	87.3	72.4	86.6
1874	79.0	81.6	78.3	81.4	78.3	80.6	73.3	82.4	74.0	84.2	72.0	86.3
1875	80.1	81.6	78.9	82.2	78.3	82.6	74.2	87.1	74.3	88.3	73.7	88.2
1876	80.1	84.2	79.0	83.0	77.8	83.7	75.8	87.1	73.0	90.0	72.5	86.0
Average { Maximum. Minimum	79.6	82.0	79.1	82.5	78.0	82.5	76.3	86.0	74.8	87.7	73.7	86.3
Average range ...	2.4		3.4		4.5		9.7		12.9		13.1	
Mean temperature ...	80.8		80.3		80.25		81.15		81.25		80.25	

Mean annual temperature 81° 45'.

SERIES (B).

Observations from 1st January 1877 to 30th June 1878.¹

YEAR.	January.		February.		March.		April.		May.		June.	
	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.
1877	67.6	86.8	69.2	85.7	72.7	88.0	76.0	89.3	79.1	91.5	78.0	88.7
1st January to 30th 1878	68.4	86.1	69.6	88.8	73.7	88.6	77.7	91.1	81.1	93.0	78.8	88.9
Average { Maximum. Minimum	68.0	86.4	69.4	87.2	73.2	88.3	76.8	90.2	80.1	92.2	78.4	88.8
Average range ...	18.4		17.8		15.1		13.4		12.1		10.4	
Mean temperature ...	77.2		78.3		80.75		83.5		86.15		83.6	

YEAR.	July.		August.		September.		October.		November.		December.	
	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.
1877	78.9	87.5	77.0	83.0	75.9	85.5	75.6	87.1	73.3	92.6	73.0	91.5
1st January to 30th June 1878... ..	...	...	...	...	...	...	...	...	...	...	...	...
Average { Maximum. Minimum	78.9	87.5	77.0	83.0	75.9	85.5	75.6	87.1	73.3	92.6	73.0	91.5
Average range ...	8.6		6.0		9.6		11.5		19.3		18.5	
Mean temperature ...	83.2		80.0		80.7		81.35		82.95		82.25	

Mean annual temperature 81° 63'.

¹ These observations were taken with self-registering thermometers, supplied by the Observatory in and prepared under the Superintendent's directions.

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According to both series of observations the lowest minimum average is reached in January. On the 7th January 1873 the lowest minimum and maximum limits, $63^{\circ} 5'$ and 73° , reached during a period of observation extending over four years, were registered by Dr. C. Joynt, M.D., at his house in Ratnágiri. The maximum and minimum rises are nearly regular and uninterrupted during each successive month from January to May, the exceptions being the maximum of February 1876, which is $2^{\circ} 2'$, and the minimum which is $3^{\circ} 7'$ lower than that of January of the same year, and the maximum of February 1877 which is $1^{\circ} 1'$ lower than that of January. There is a marked fall in the maximum temperature from May to June, and a less marked, but still perceptible fall in the minimum. There is a similar fall between June and July. During July, August, and September the readings shew little variation either in the maxima or minima, the rise or fall during these months apparently depending entirely on the scarcity or abundance of rain. The range of the thermometer is also very slight at this period, and very much less than at any other time of the year. From September to October there is a marked rise in the maximum temperature and at the same time a fall in the minimum, the only exception occurring in July 1877, when the maximum, owing to the exceptionally scanty rainfall, stood higher than in October. Similarly there is a uniform rise in the maximum from October to November, and except in 1875, a fall in the minimum. From November to December there is, with one or two exceptions, a fall both in maxima and minima. The readings in Series A show May to be the hottest month, the thermometer giving a mean average temperature of $87^{\circ} 4'$, and at the same time the highest maximum average of $91^{\circ} 6'$. Series B also shows the highest mean temperature for May ($86^{\circ} 15'$); but the average maximum was exceeded by that of November, ($92^{\circ} 6'$), in 1877. This high temperature in November was abnormal, and is accounted for by the deficiency of the rainfall of that year. The subjoined table¹ gives the results of the thermometer readings at the civil hospital of Dápoli for the years 1871 to 1877 inclusive. From this it will be seen that the mean annual temperature of Dápoli is rather more than five degrees lower than that of Ratnágiri, $76^{\circ} 27'$ as compared with $81^{\circ} 45'$ and $81^{\circ} 66'$ shewn by the Ratnágiri observations, and that the average maxima and minima are also uniformly lower for each month in the year. According to Mr. Chambers the annual mean is $78^{\circ} 5'$, and the range between greatest and least monthly means $9^{\circ} 5'$.

¹ Prepared by A. Pollard, Esquire, Honorary Surgeon, Dápoli.

Thermometer readings at the Civil Hospital, Dápoli, 1871-1877.

YEAR.	January.		February.		March.		April.		May.		June.	
	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.
1871	63	82	65	84	65	92	75	89	76	88	73	88
1872	56	82	59	86	70	89	75	92	74	90	75	90
1873	62	79	64	85	62	85	72	85	76	87	76.5	81.5
1874	62	79.5	64.5	79.5	68	81	73	85	79	85.5	76.5	81.5
1875	61	77	65.5	79	71	83	76	86	78.5	85.5	78	82
1876	65	78	62.5	79	73	81	69	86	77	87	76	87
1877	60	84	61	84.5	65	87	68	90	73	88	74	89
Average { Maximum Minimum.	61.3	81.6	63	82.4	67.7	85.4	72.5	87.5	76.2	87.2	75.5	85.5
Average range ...	10.3		19.4		17.7		15		11		10	
Mean temperature ...	66.45		72.7		76.5		80		81.7		86.5	

YEAR.	July.		August.		September.		October.		November.		December.	
	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.
1871	74	86	74	79	74	80	73	84	74	85	66	84
1872	74	89	73	79	73	89	66	82	86	84	66	83
1873	76	79.5	76	78.5	74.5	78	72	82	69.5	82	67	81.5
1874	75	78	75	78	75	78.5	73	79.5	67.5	80	66	79
1875	75.75	79	75	78	74	77	72	80	70	81	67	78.5
1876	74	81	73	78	71	80	67	83	67	84	60	83
1877	76	83	74	82	75	85	72	82	67	85	68	83
Average { Maximum Minimum.	75.2	80.07	74.2	78.9	73.8	79.8	70.7	81.8	71.7	83	65.7	81.7
Average range ...	4.87		4.7		6		11.1		11.3		16	
Mean temperature ...	77.4		76.5		76.8		76.2		76.8		73.7	

Mean annual temperature 76° 27'.

The annexed statement gives the result of the meteorological observations at the sea coast town of Vengurla in the extreme south of the district, during the year 1857 :—

Vengurla Meteorological Return, 1857.

MONTH.	Mean Temper- ature.	Mean Daily Range	Mean Maxi- mum.	Mean Mini- mum.	Mean Sun's Temper- ature.	Rain, Inches.	Wind.		Days of Sun- shine.
							Direction.	Force.	
January ...	77.22	12.16	83.22	71.12	90.09	...	N.E. & W. ...	Moderate ...	31
February ...	77.14	14.00	84.21	70.07	95.53	...	N.E. at 6 a.m. and W. at 1 p.m.	Do. ...	28
March ...	79.81	11.19	85.41	71.22	97.55	...	Do. ...	Do. ...	31
April ...	81.49	10.33	86.63	76.33	101.13	...	N.W. & W. ...	Calm ...	30
May ...	83.12	4.16	85.76	81.54	97.16	...	N.W. & S.W.	Stormy ...	23
June ...	81.15	7.50	84.90	77.49	85.89	34.89	S.W. & S.S.W.	Do. ...	...
July ...	78.72	7.83	82.64	74.80	89.25	46.49	Do. ...	Do. ...	...
August ...	77.72	2.22	78.84	76.61	82.00	25.92	Do. ...	Do. ...	20
September ...	77.86	3.89	79.76	75.96	81.12	4.67	West & W.S.W.	Do. ...	16
October ...	81.27	4.03	84.29	79.25	84.93	3.46	Westerly ...	Do. ...	19
November ...	80.45	8.10	84.50	76.40	85.13	25	Easterly and Westerly.	Fresh ...	27
December ...	80.22	11.19	85.83	71.61	84.41	...	N.E. & W. ...	Do. ...	31

Chapter I.
Description.
Climate,
Dápoli,

Vengurla.

Chapter I.**Description.**

Climate.

Dápoli.

After the close of the south-west monsoon, north-westerly breezes prevail throughout the remainder of the year, blowing with more force and regularity during the hot months of March, April, and the first half of May, and tempering the greater heat of this period of the year. On the coast and inland, as far as the cool sea breezes penetrate, the hot season is perhaps the most agreeable, and at the same time the healthiest season of the year. The breeze usually springs up from nine to ten in the morning and lulls shortly after sunset. The nights are still, but seldom oppressive, and the little wind that blows is a land breeze. The mornings until the sea breeze sets in are the hottest and most trying time of the day. At a distance of fifteen or more miles from the sea, greater extremes of heat and cold are experienced, and during March, April and May, both days and nights are oppressive. At Chiplun, Khed, or Sangameshvar, the thermometer during the hot season will shew 105° at noon for days and sometimes weeks together, and the wind is both hot and moist. In the tract of country at the foot of the Sahyádrí range the heat is still greater during the hot weather, being intensified, as the natives assert, by the refraction of the trap rocks at the summits of the hills. Dápoli is generally considered the healthiest station in the district, its equable temperature, excellent drinking water, and the fine open plain on which it stands specially fitting it for a military cantonment, and a residence for Europeans all the year round. On the other hand, the Mandangad or Bánkot portion of the Dápoli sub-division, owing to the prevalence of fever, is perhaps the least healthy part of the district. The rest of the collectorate including all the south, which is comparatively hotter than the north, is generally healthy though enervating and relaxing.

The climate may be considered favourable for recovery from miasmatic fever even of long standing, and perhaps for rheumatism when the constitution is unimpaired, favourable for those whose livers suffer from the dry heat of the Deccan, unfavourable for constitutional debility, nervous affections, chronic dyspepsia, and all complaints requiring a light and bracing atmosphere; fatal in the monsoon to those subject to bowel complaint. Children thrive well and appear for the most part plump and lively; yet new-comers from a dry climate are apt to suffer from boils.

CHAPTER II.

PRODUCTION.

SECTION I. — MINERALS.¹

ACCORDING to a legend, the truth of which the presence of quartz makes not improbable, gold used to be found near Phonda at the foot of the Sahyádrí hills. In the south very pure specular iron is in small quantities associated with the quartz rock. And all the laterite of the district is charged with iron² though in too small a proportion to make it worth smelting. Near Málvan iron ore is found, not far under ground, in detached masses on the tops of hills, its presence being marked by small ferruginous surface fragments. The ore is massive and compact; outside it is brown or reddish brown and inside steel grey and glimmering; it is brittle, and of a yellowish brown. The fragments are sharp, the fracture flat conchoidal, and the specific gravity 3·32. Before the blow pipe it yields a dark blue shining enamel. Its constituents are water, black oxide and peroxide of iron, alumina, silica, and a trace of manganese and magnesia. It contains a steel grey lamellar powder difficult of solution both in nitric and muriatic acid.³ There are several veins close to the mámlatdár's office at Málvan, three of them showing on the surface. These, it seems probable, must, at some distance below, be at least as rich as on the surface, and this belief is strengthened by observing the immense blocks of quartz rock jutting into the sea, which both in their horizontal and vertical fractures, seem to be joined by iron rusted away under the continued action of salt water. One man and boy, with pickaxe and crowbar, could in one day raise 400 pounds of good ore from the surface veins. In former times the Málvan mines and those at Gothna, a village above the Sahyádrí hills, were much worked. In 1844 the smelting of iron was carried on at Masura, Kálávali, Varangaon, and several other villages, with in most cases, four smelting furnaces in each village. To extract the iron the ore was left in the sun for a week or two and

Chapter II.

Production.

Minerals.

¹ Except the mineral, forest, and fish sections, this chapter is the work of Mr. G. W. Vidal, C.S.

² In 1873 while digging a well in the jail garden at Ratnágiri large iron stone nodules in the form of hollow shells containing scoriæ were found diffused through the laterite. And though wells near had no metallic flavour, the water of this well was so strongly impregnated with iron, both in the ferrous and ferric states, that the smallest addition of *nagent* threw down copious precipitates of Prussian and Turner's blue. C. Joynt, M.D.

³ Assistant Chemical Analyser to Government; Jour. Bom. As. Soc. I. 435.

Chapter II. Production.

Minerals.

Iron.

was then made brittle by roasting and powdered. The furnace was round, three feet high, and narrowed from $1\frac{1}{2}$ feet below to one foot above. In this about sixteen pounds of fine powdered charcoal were laid, and on the charcoal cinders and charred wood were piled, and the whole lighted. When blown into a mass of fire, about one pound weight of the powdered ore mixed in water with an equal quantity of powdered charcoal was thrown in, and this was repeated at intervals till after about three hours smelting a mass of iron about ten pounds in weight, was formed in the bottom of the furnace. This, dragged out by a pair of large pincers, was placed on an anvil, and beaten by heavy hammers. The smelting was generally repeated twice a day in the morning and in the evening, the outturn of each smelting being worth about a shilling, half of which went to the bellowsman. Though the process was known to the cultivating classes they never practised it, and it was left as a monopoly to a wandering class known as Dháydás.¹ In the smelting large quantities of fuel were used, and in 1844 partly from the increasing dearness of fuel and partly from the fall in the price of iron, it was made only in small quantities. Formerly the yearly outturn was worth about £200 (Rs. 2000). In 1855 a Mineral Viewer sent to examine the Málvan and Sávantvádi mines reported that superior iron could be obtained, but from the want of coal the quantity would always be small. It would never meet the demand for railway bars though it might supply a superior iron for general purposes. The local manufacture is said to have now almost entirely ceased.

Coal.

At certain depths are occasionally found remains of trees changed or changing into a kind of coal in which is imbedded a large quantity of crystallized pyrites. Some of the seeds of the trees occur separately with similar crystals imbedded in their centres.

Talc.

Below the laterite crust appear in some places, as in the Rámgaḍ district, immense veins of talc associated with and running into quartz rock. This, made into cooking pots and dishes, is sold in small quantities, the vessels being valuable to chemists as they can stand the most intense heat.

Stone.

The ² stones used for building purposes are blue basalt or trap and laterite. A soft description of sand stone is found near the sea shore, but it is only fit for use in works of an inferior class. This stone is cut into oblong blocks of a small size, and walls, built of this material with a coping of a harder kind of stone, have a neat appearance. Trap stone is found in most parts of the district, but it varies much in quality and a good deal of it is unfit for building purposes. The best quality is hard, of a light colour, breaking with a clean fracture, and ringing when struck with a hammer. The black stone of which the old fort at Harnai is built, is soft and the ramparts are now fast crumbling away. Trapstone work of a common class can be executed cheaply, but good cutstone work, for

¹ Jour. Bom. As. Soc. I. 436.

² Contributed by C. Brereton, Esquire, C.E., Executive Engineer.

which carefully dressed stones are required, is expensive, as, for this class of work, masons have, as a rule, to be brought from the Deccan. The cost of quarrying trapstone varies from 10s. to £1 12s. (Rs. 5 - 16) the 100 cubic feet, according to the size of stone and class of work required. Laterite, the stone most in use, is a clay-stone impregnated with iron in the form of red and yellow ochres with a perforated and cellular structure. It is easy to work, but care is required in the choice of stone as the inferior sorts decay rapidly when exposed to the weather. The masons, who work in laterite, called *kokirs*, are mostly native Christians from Goa. Laterite stone cost at the quarry from 8s. to 10s. (Rs. 4 - 5) the 100 cubic feet. It may be obtained of almost any size. The rate for the best sort of laterite masonry work is £2 10s. (Rs. 25) the 100 cubic feet.

In making and repairing roads two kinds of metal are used, trap and laterite. The former costs 10s. (Rs. 5), and the latter from 4s. to 6s. (Rs. 2 - 3) the 100 cubic feet.

Sand or gravel of a good quality is found in the beds of most streams and rivers. The rates vary from 3s. to 7s. (Rs. 1½ - 3½) the hundred cubic feet. The metallic sand, used instead of blotting paper for drying ink, is found at the mouths of several of the rivers. A superior kind of red clay for the manufacture of butter-pots, bowls, and water jars is found at Málvan.

The lime in general use is made from calcined cockle shells. There is an inexhaustible quarry of these shells in the bed of the Ratnágiri creek near the village of Juva, about two miles from Ratnágiri. This quarry supplies the whole district with lime, which, according to quality, in Ratnágiri costs from £1 4s. to £1 10s. (Rs. 12 - 15) the 100 cubic feet. Shell lime possesses but little cementing properties and only answers when used with laterite stone. Unless mixed with portland cement it is not fit for use in high class trap masonry. Lime stone is found at Chuna Kolvan in Rájápur and in the Sálva hill in Devgad. The stone found at Sálva is of a superior description and yields when burnt a large percentage of lime, but owing to the isolated situation of the quarry the lime is so costly that it is cheaper to get lime from Bombay which costs delivered at Ratnágiri £2 16s. (Rs. 28) the 100 cubic feet.

Good brick-earth is found in several parts of the district. The best at the village of Patgaon in Sangameshvar. Burnt bricks are made at Khed and Chiplun and are suitable for rough work. The usual price is 14s. (Rs. 7) the thousand. The rate for tiles varies from 6s. to 7s. (Rs. 3 - 3½) the thousand. Ridge tiles cost 4s. (Rs. 2) the hundred.

SECTION II. — FORESTS AND TREES.

In 1756, when Fort Victoria was captured by the British, most of the tributary ravines and water-courses of the lower reaches of the

Chapter II Production.

Minerals.
Stone.

Road Metal.

*Sand
and Clay.*

Lime.

*Tiles and
Bricks.*

Forests.

Chapter II.

Production.

Forests.

Bánkot creek were clothed with fine teak.¹ Curved teak logs known and highly prized as 'Bánkot knees' were largely exported to Bombay, and it is probable that the ribs and framework of most of the fine old ships of the Indian Navy came from Bánkot and its neighbourhood. Gradually all forest on the borders of the Sávitri and Váshishti rivers was felled, used in ship building on the creeks, or removed to the Bombay yards. At the same time, Arab traders were carrying to Zanzibar the best timber along the Ratnágiri and Muchkundi rivers. The Maráthás had large ship-building yards at Málvan and Vijaydurg. But while they consumed much fine timber, the rulers thought for the future and took steps to preserve the supply. The only valuable teak reserve now left in the south Konkan, 'Bándh tivra' in the Dápoli sub-division, and the Mhán, Dhámápur, and Pendur forests at Málvan were sown by Kánhoji Ángria about 1680, and in all their territories his successors stringently enforced forest conservancy. Half-way between Bánkot and Rájápur, too far from Rájápur and with trade insufficient to attract the Arab ships, the lands along the south banks of the Shástri river and its tributary the Báv were covered with fine forest, mostly teak, much of it of a large size. About the beginning of the present century the district was richly wooded. This was mostly brushwood, but on the slopes and spurs of the Sahyádris, on the undulating red soil strip that runs midway between the Sahyádris range and the sea, and on the banks of many streams, rivers, and estuaries, there was abundance of *ain*, *kinjal*, and teak of no great size but hard and lasting, much valued for ship building. At this time the district was thinly peopled, and except round the hill forts, cultivation was scarcely possible. The Peshwa Bájiráv, and after the transfer of the district (1818), the British Government imported and settled labourers; tillage gradually spread, fire and the axe cleared large tracts of dense scrub and even of fine timber, and areas nearly as large again were gradually laid bare to supply wood ashes to enrich the new fields. The Marátha Government always cared for its trees and forests. Though allowed to supply their own wants, the people seem to have been prevented from selling or exporting timber. For some time the British Government maintained the old restrictions; but about 1829, on the suggestion of the Collector Mr. Dunlop, the forests were, for the most part, placed at the disposal of the people. The land-holders, it was thought, would regard the forests as among their best resources, use them thriftily, and husband them with care. But with almost all, the grant was considered a charter for unlicensed, unlimited, and unguarded wood-cutting. The nearness, and the ease and cheapness of the sea carriage to Bombay tempted the people to busy themselves in felling, cutting, and carrying timber. Untold quantities of Ratnágiri wood were, year after year, sent to Bombay. The forests on the south banks of the Shástri and Báv rivers had, until Mr. Dunlop's proclamation, stood almost uninjured. After the proclamation, the land-holders

¹ Hové (December 1788) mentions that the hills on both sides near Fort Victoria were overgrown with high teakwood trees almost to the marshes. In another place he says (194) the country is one wood. At the same time further up, near the town of Mahád the hills were totally destitute of verdure (193). Bom. Gov. Sel. XVI. Forbes (1771) speaks of the western hills near Fort Victoria as bleak and barren. Oriental Memoirs, I. 190.

sold the standing timber as fast as they could find buyers, and fleets were built of the largest native craft.¹ The result is that for the present the Ratnágiri forests are almost destroyed.

The present tree-covered area, nearly 100,000 acres or about four per cent of the whole district, may be divided into four parts: Government reserves, private forests, cocoanut gardens, and village groves. The principal Government reserves are: Bándhtivra in the Dápoli sub-division; Vádibeldár and Mahipatgad in the Khed sub-division; Vishálgad in the Rájápur sub-division; and Mhán, Dhámápur, and Pendur in the Málvan sub-division. The private forests, some of them exceedingly well-cared for, varying from one-half to 500 acres belong to 434 persons in 162 villages. The cocoanut groves fringe the sea coast and the shores of all estuaries; they are very dense and increase in area every year. As regards the village groves of the 1337 district villages, scarcely one has not mango, oil-nut,² and jack trees in profusion. Each division, *váda*, of the village, Bráhma, Mhár, or Chámhbár, nestles in the shade of its fruit trees, while the nooks and ravines are often covered with thick clumps of wild fig,³ banian, and other large forest trees. The following statement shows in detail the distribution of the tree-covered area of the district:—

Ratnágiri Tree-Covered Area, 1878.

SUB-DIVISION.	Villages.	Government reserves.		Private reserves.		Cocoanut groves.		Village plantations.		Total Area	
		Acres.	Gunthás.	Acres.	Gunthás.	Acres.	Gunthás.	Acres.	Acres.	Gunthás.	
Dapoli	250	2756	32	1802	11	1681	2½	12,500	18,740	5½	
Khed	147	2488	5	763	20½	88	34½	7350	10,690	19½	
Chiplun	213	856	28½	639	30½	831	38½	10,650	12,978	17½	
Saogameshvar ...	155	112	14			4	32	7750	7867	6	
Ratnágiri	146			202	18	1575	16	7300	9077	34	
Rájápur	212	2988	38		6	58	12	10,600	13,647	16	
Devgad	135			10,448	30	338	4	6750	17,536	34	
Málvan and Vengurla	79	2042	29	6		3315	31	3950	9814	20	
Total	1337	11,245	20½	13,862	35½	7894	10½	66,850	99,852	32½	

* The area of village plantations is only a rough estimate.

So far the forest denudation seems not to have affected the rainfall, nor has it so impaired the timber resources as to raise the fear that the district will suffer from want of good and cheap building material, whether for native coasting craft or for houses. For the smaller craft the local supply suffices, and for larger boats good and cheap timber can be easily brought from the Malabár coast. The abundance of cocoanut leaf mats and bamboos, makes the demand for house timber small. It is easily supplied on the spot. In one respect the loss of so much forest has harmed the district.

¹ About twenty years ago, Mr. Crawford found several of these ship-owners in a flourishing condition. One of them had no less than thirty-one *shibuds*, the largest native craft ranging from 275 tons (1100 *khandis*) burthen downwards, built on the Shástri.

² *Undi* or *undin*, *Calophyllum inophyllum*.

³ *Ficus retusa*, *nandruk*.

Chapter II.

Production.

Forests.

Their sources and upper courses stripped of trees, the torrents sweep away large quantities of soil, and this settling in the still tidal basins is filling the beds of the navigable rivers. The Sávitrī, along whose banks the denudation is complete, has suffered most. The Váshishti, whose banks and adjoining ravines are also bare, has become impassable for large craft, four miles lower than in former days. On the Shástri river, Sangameshvar where not thirty years ago the largest native vessels could load and unload, is now six miles from the nearest navigable point. In like manner, the Muchkundi, Rájápur, and Vijaydurg rivers have silted for miles below the once large ports of Rájápur and Khárepátan.

The measures proposed by the Collector Mr. Crawford, in November 1878, for forest conservancy and extension, were the increase of the present, and the creation of new Government reserves; the encouragement of land-holders willing to establish or extend private forests; and the reassertion of Government rights more or less abandoned in the past ten years.¹ As regards khoti villages, the scheme approved by Government for the extension of forest reserves is as follows: where the Khot or hereditary farmer of the village revenues is prepared to hand over assessed lands suitable for forests, Government on their part agree to remit the assessment and to pay to the Khot one-third of the value of the forest produce when sold from time to time.²

Trees.

Liquor-yielding
Trees.

From an economic point of view the cocoanut palm, *Cocos nucifera*, is by far the most important tree in the district. It replaces the brab or palmyra, *Borassus flabelliformis*, and the wild date tree, *Phœnix sylvestris*, which are so plentiful in the northern Konkan. The cocoanut gardens are with few exceptions situated on the sea coast, on beds of sandy deposit or of silt brought down by the rivers. The soil of the river silt being much richer, the gardens are proportionally more valuable. As a rule, trees owned by Bráhmans and Maráthás are kept for fruit only, while those held by Bhandáris are tapped for their juice or toddy. But many Bráhmans who will not themselves engage in the tapping or liquor-trade, have no scruple about letting their trees to Bhandáris for this purpose. From the earliest times cocoanut trees have, under one form or another been subjected to special cesses, a distinction being always made between trees reserved for fruit and trees kept for tapping. In the former case the individual trees were occasionally taxed; but more often the land itself was, without reference to the number of trees standing on it, assessed at high and special rates. A special cess was under the Peshwá's rule, levied on every tree tapped for liquor, *bhandár-mál*, and the right to collect this cess was, under the name of *kutikunnári*, farmed in the Málvan and part of the present Devgad sub-divisions, and elsewhere collected direct by the state. The maximum leviable rate was in Málvan and Devgad 2½*d.* (1 *a.* 8 *p.*) a month, or 2*s.* 6*d.* (Rs. 1¼) a year on

¹ Forest details are compiled from Mr. Crawford's Report, 2861, dated 21st November 1878 and from H. E. the Governor's Minute dated 31st July 1878.

² Bom. Gov. Res. 4881 of 1879.

each tree tapped. Under the new system a special license is granted to tap trees, at a fixed rate for each tree, and under certain conditions as to the number of trees included in the license. The licensees are allowed to sell toddy by retail at the foot of the tree, but not to distil, the latter privilege being vested exclusively in the licensed shopkeepers for the sale of country spirits. The total area of land under cocoanut cultivation is 7894 acres. The exact number of cocoanut trees in the district cannot be stated with accuracy. But counting 100 trees for each acre of garden land, which is an extreme estimate, an approximate total of 789,400 trees is reached. The following table shews in the settled sub-divisions the number of trees for which tapping licenses were granted for the five years ending 1876-77 :—

Ratnágiri Liquor-Yielding Trees, 1872-1877.

SUB-DIVISION.	TREES LICENSED TO BE TAPPED.				
	1872-73	1873-74	1874-75	1875-76	1876-77
Ratnágiri	9581	12,314	11,726	6048	5299
Chiplun	7741	5437	6373	5057	5154
Khed	31	31	40	46	71
Dápoli	10,174	19,388	10,874	10,560	8013
Total	27,517	28,170	29,013	21,711	18,837

Toddy-yielding trees let at from 2s. to 6s. (Rs. 1-3) a year, the yield varying for each tree from thirty-five to sixty-four imperial gallons (8-16 *mans*). Ordinarily, three kinds of palm spirits are manufactured, called respectively *rási*, *phul* or *dhauti*, and *phéni*, *rási* being the weakest and *phéni* the strongest spirit. In some places a still stronger spirit called *durási* is manufactured. The strength of these spirits probably varies greatly in different parts of the district.¹ The average wholesale rates at which the farmers buy stock from the manufacturers are for the imperial gallon, *tídi* 2½d. (1 a. 10 p.), *rási* 8½d. (5 as. 7 p.), *phul* 1s. 1½d. (8 as. 9 p.), *phéni* 2s. 6¾d. (Rs. 1-1-6), and *durási* 4s. 9½d. (Rs. 2-6-4). Retail prices vary considerably according to locality. In Ratnágiri the prices formerly fixed by regulation were 1s. 11¼d. (15 as. 10 p.) the gallon for *rási*, 2s. 4d. (Rs. 1-2-8) for *phul*, and 4s. 3¾d. (Rs. 2-2-6) for *phéni*. Recently, fixed wholesale and retail prices have been abolished, and the farmers permitted to arrange their own terms with the Bhandáris on the one hand, and their customers on the other. In the villages and landing places on the coast, where toddy, both sweet and naturally fermented, is easily procurable in every Bhandári's garden, the consumption is comparatively much larger than that of distilled spirits. But in the inland districts, where, owing to the distance from the trees the importation of

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Trees.
*Liquor-yielding
Trees.*

¹ Three samples of toddy spirits from Ratnágiri priced respectively 4 annas 11 pies (7½d.), 2 annas 7 pies (4d.), and 1 anna 11 pies (3d.) per reputed quart bottle were found by analysis to be 25.2, 60.1, and 69.7 degrees below proof. Report of the Chemical Analyser to Government. 1878-79, 27.

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Liquor-yielding Trees.

sweet juice is next to impossible, fermentation setting in within twenty hours of its extraction, no fresh and but little fermented toddy is consumed.

The spirits are distilled in private stills, licensed to be kept at certain Bhandáris' houses under fixed conditions, as required in proportion to the number of trees licensed to be tapped in the vicinity. One still is usually allowed for every hundred trees, and the still-pot is limited to a capacity of twenty gallons (5 *mans*). The following estimate shews roughly the profits derived from cocoanut cultivation, the trees being kept for fruit only, and being grown on the best coast garden, *ágarí báqáqat*, land. The calculation gives for each tree a net yearly profit of 2s. 4½d. (Rs. 1-3-0).¹ The profits from the inland gardens, *dongri báqáqat*, are much less. The returns from tapped trees cannot be estimated with any accuracy, but they may safely be assumed to be considerably higher. A cocoanut tree as a rule yields no return either in fruit or juice for the first eight or ten years, though under exceptional circumstances trees occasionally bear in their sixth year. The trees live for seventy or eighty years, but do not generally bear fruit for more than sixty years. If tapped they become unproductive much sooner.

The only other liquor-yielding palm found in the district is the *ráimád* or *surmád*, *Caryota urens*. It is generally distributed, but is tapped only in the Dápoli sub-division, where are several scattered plantations. These trees are Government property, and their number is 2692. The right to tap them and sell the juice in its sweet state at the plantations, is yearly put up to auction.

Timber Trees.

The following is a list of the principal timber trees found in the district:—

Teak, *ságcán*, *Tectona grandis*, grows in suitable localities on the slopes of hills, but seldom attains any size, the trees being principally useful for rafters. It is plentiful in the

¹ The details are: average yearly produce of 100 cocoanut trees: 8000 cocoanuts at 8s. (Rs. 4) the 100, £32 (Rs. 320); 800 *serst* of fibre at 6 *pas* a *ser* £2-10 (Rs. 25); 800 palm leaves, *ghámpos*, at 3 *pas* a leaf, £1-5 (Rs. 12-8); firewood £1 (Rs. 10). Total £36-15 (Rs. 367-8). Average yearly expenditure incurred on a garden containing 100 trees. Wages of a labourer for eight months in the year to water 50 trees a day on alternate days at 10s. (Rs. 5) a month, £4 (Rs. 40); yearly charge to cover original cost of a masonry well £30 (Rs. 300) and estimated to last 50 years, say 12s. (Rs. 6); yearly charge to cover original cost of a masonry duct, £2-10 (Rs. 25) to last 50 years, 1s. (8 *as.*); annual charge for fencing garden, 12s. 6d. (Rs. 6-4); Government assessment on one acre of garden land including local fund cess, say £1-12 (Rs. 16); yearly cost of watering 100 trees, by water-lift worked by a single bullock, ropes 4s. 9d. (Rs. 2-6); 200 earthen pots 2s. (Rs. 1); sticks to fasten the pots to the rope 1s. (8 *as.*); yearly charge for beam for the water wheel costing 10s. (Rs. 5), and lasting five years, say 2s. (Rs. 1); other timber 2s. (Rs. 1); keep of bullock £1 (Rs. 10); yearly charge for a pair of cogged wheels costing 10s. (Rs. 5), and lasting 10 years 1s. (8 *as.*); yearly charge on outlay of £2 (Rs. 20) for bullock, to work for 10 years, 4s. (Rs. 2); yearly charge on outlay of £2 (Rs. 20) for two teak posts to last 10 years, 4s. (Rs. 2); contingencies 2s. (Rs. 1); total £2 2s. 9d. (Rs. 21-6). Yearly interest at 6 per cent on a capital of £200 (Rs. 2000) invested in land £16 (Rs. 160); grand total £25 3d. (Rs. 250-2).

² This is 125 rupees weight or about 1½ lb. of a pound

Dápoli sub-division where there are some flourishing reserves, and scarce in Khed and elsewhere throughout the district. Blackwood, *shisar*, *Dalbergia sissoo*, sparingly distributed, is of small size and crooked growth. *Ain*, *Terminalia tomentosa*, or *Pentaptera coriacea*, grows plentifully in the Khed sub-division and elsewhere. *Kinjál*, *Terminalia paniculata*, is also plentiful, and like the *ain* much used for plough handles. *Khair*, *Acacia catechu*, is common. Catechu, *kát*, extracted from the heart wood of this tree used to be the source of a small revenue to Government, and of employment to the aboriginal tribe of Kátkaris, who derive their name from the occupation. *Nána*, *Lagerstræmia lanceolata*, is common. *Tíman*, *Lagerstræmia reginæ*, common and generally distributed near the coast, but not found far inland, yields good timber. Its rich lilac flowers make it a conspicuous object during the hot season. *Asína*, *Briedelia retusa* or *spinosa*, generally distributed, is a valuable timber tree. *Helu*, *Nauclea* or *Adina cordifolia*, common on the coast is of large size, the wood rather soft. *Arjun*, *Terminalia* or *Pentaptera arjuna*, the white *ain*, common near streams and rivers, grows to a very large size. *Bakúl*, *Mimusops elengi*, found mostly as a cultivated tree, is preserved chiefly for its strong smelling flowers which are used for garlands. *Kumbha*, *Careya arborea*, is common, of small size and generally crooked. *Karambel*, *Olea dioica*, is common on the slopes of the Sahyádrí hills. *Bhendi*, *Thespesia populnea*, grows freely near the sea coast. The *Bábul*, *Acacia arabica*, is not found within the limits of the district, and every attempt to introduce it has failed. Bamboos, *Bambusa vulgaris* and *Dendrocalamus strictus*, are cultivated with great success, and the *Casuarina*, *suru*, *Casuarina equisetifolia*, has been found to thrive well in the Dápoli sub-division. The sand hills on the coast would make excellent casuarina groves.

The commonest Fruit Trees are mango, *ám̐ba*, *Mangifera indica*, which grows luxuriantly everywhere, and is in Ratnágiri, Dápoli, and Bánkot, highly cultivated by grafts. Jack, *phanas*, *Artocarpus integrifolia*, is found with the mango in every village homestead throughout the district. It is carefully cultivated everywhere and attains a large size. Dr. Gibson mentions that he has seen in the old forts at Suvarndurg and Ratnágiri jackwood pillars four feet in diameter. *Undi*, *Calophyllum inophyllum*, is common on the coast, and valuable on account of the bitter oil extracted from the seeds. The trunks of this tree are scooped out into canoes. The Indian Mangosteen, *rátambi* or *kokam*, *Garcinea purpurea*, generally distributed yields the vegetable concrete oil sold as Kokam. This oil is used in the southern districts as a substitute for butter. The dried acid fruit is also used in cookery and with the addition of syrup and water makes a palatable cooling drink. In the Collector's garden at Ratnágiri some trees, said to have been grafted from plants brought from the Straits, yield delicious fruit just like the imported mangosteen. Cashewnut tree,

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Trees.

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Fruit Trees.

Chapter II.**Production.****Trees.****Fruit Trees.**

kāju,¹ *Anacardium occidentale*, grows plentifully especially in the southern sub-division. The fruit is eaten, and the astringent juice is used by native workmen as a flux for soldering metals. Tamarind, *chinch*, *Tamarindus indica*, is common about village sites. The Black Plum, *jambul*, *Eugenia jambolana*, is common everywhere. Wood apple, *kavanthi*, *Feronia elephantum*, is generally distributed. *Behda*, *Terminalia belerica*, is common. *Bibea*, *Semecarpus anacardium*, the marking nut tree and the Jujube tree, *bor*, *Zizyphus jujuba*, are common everywhere both on the coast and inland. The Gallnut tree, *hinda*, *Terminalia chebula*, grows well. The galls are used for dyeing, but in this district seldom for ink making. The bark is used for tanning. *A'eli*, *Phyllanthus emblica*, and Soapnut, *ritha* or *ringi*, *Sapindus laurifolius*, are also found throughout the district. Of the above trees the wood of the jack and the tamarind is used extensively as timber, while the scooped out trunks of the mango and the *undi* furnish serviceable canoes.

The following trees are also more or less commonly cultivated in irrigated garden lands:—

Cocoanut, *niral mād*, *Cocos nucifera*; Betelnut, *supāri* or *pophal*, *Areca catechu*; Lime, *limbu*, *Citrus acida*; Guava, *peru*, *Psidium pomiferum*; Citron, *mahālungi*, *Citrus medica*; Plantain, *ket*, *Musa sapientum*; Pineapple or Shaddock, *pappas*, *Citrus decumana*; Pine apple, *ananas*, *Ananas sativus*; Bullock's heart or Sweet Soy, *ratuphal*, *Anona reticulata*; Custard apple, *sitiphal*, *Anona squamosa*; Pomegranate, *dālimb*, *Punica granatum*.

Cesses on Fruit Trees.

Under the Peshwā's rule certain fruit trees were subject to a cess, *dast*, varying in amount in different localities. This tax is still levied in those sub-divisions where the survey settlement has not been introduced. There has been no fresh enumeration of trees since the district came under British rule, and in levying the cess no account is taken of increase or decrease in their number. Permission however is required before cutting down any tree subject to the cess. The particular trees taxed in khoti villages vary slightly in different parts of the district. The following list embraces all: Jack, *Artocarpus integrifolia*; *ratambi*, *Garcinia purpurea*; *undi*, *Calophyllum inophyllum*; tamarind, *Tamarindus indica*; cashew, *Anacardium occidentale*; cocoanut, *Cocos nucifera*; and betelnut, *Areca catechu*. The two last are subject to the cess only when grown on other than garden lands. In Government villages where the survey settlement has not been introduced a fee is levied on the produce of all trees bearing valuable or marketable produce. As an illustration of the very minute supervision exercised by the native revenue officers under the Peshwā's rule, one or more

¹ The local vernacular name *kāju* appears to be restricted to the Konkan. The tree is indigenous to the West Indies. It is probable that the Portuguese on its introduction to the west coast of India, called it *kaju*, as a rendering of the Brazilian *acajou*. The French by a similar transliteration called it *casher*.

banyan trees, *Ficus indica*, in the Ratnágiri sub-division, were subjected to the cess on account of the number of *undi*, *Calophyllum inophyllum*, berries dropped beneath them by a colony of flying foxes, who had taken up their quarters there. The banyan trees were in themselves valueless, but the fortunate owner who thus secured a plentiful crop of oil bearing material, was not suffered to escape paying his fair share of the spoil to the state. An average betelnut tree will produce annually from two to three pounds of nuts, worth from 1s. to 1s. 6d. (8 to 12 *annus*). The produce of jack trees varies greatly, according to the soil and the trouble bestowed on their cultivation. Under very favourable conditions a jack tree will produce as many as 400 jacks, but this is exceptional. As a rule it is found that the trees which produce the fewest jacks make up for the deficiency in number by the increased weight of the fruit. The average yearly profit on each jack tree may be estimated at about 4s. (Rs. 2). Grafted mangoes are by far the most profitable of all fruit trees. In a good season a matured tree will yield a crop of from 800 to 1000 mangoes, which at 8s. (Rs. 4) a hundred, will sell for from £3 1s. to £4 (Rs. 32 - 40). Fruit from specially good grafts commands a considerably higher price. Common mango trees yielding an equal weight of fruit do not return a yearly profit of more than 2s. (Re. 1). Tamarind trees, which are comparatively poor in this district, yield about half a hundredweight of fruit, worth about 1s. (8 *as.*). A good cashewnut tree, *Anacardium occidentale*, will in Mályan, where much trouble is taken in their cultivation, yield a yearly profit of not less than 10s. (Rs. 5). Elsewhere the profit does not exceed 2s. (Re. 1). The *undi*, *Calophyllum inophyllum*, yields a crop of fruit which will produce from 28 to 35 pounds of oil worth about 9s. (Rs. 1½); while the wood apple, *karanthi*, *Feronia elephantum*, produces 14 pounds of oil valued at 3s. (Rs. 1½). A full sized *kokum* tree, *Garcinia purpurea*, yields every year from 1s. to 2s. (8 *as.* to Re. 1) worth of concrete oil. The yearly produce of a gallnut tree, *hirda*, is, if collected, worth about 1s. (8 *as.*); and of a *bheda*, *Terminalia belerica*, the fruit of which is used medicinally, about 3d. (2 *as.*). The *arli*, *Phyllanthus emblica*, also yields about 3d. (2 *as.*) worth of fruit, which is dried and used both for medicine and food. Plantains return about 6d. (4 *as.*) a tree. There are numerous other trees such as the *bor*, *Zizyphus jujuba*, whose fruit is picked and eaten, but not brought to market.

Besides trees already enumerated, such as the mango, the tamarind, and the jack, there are many trees, useful chiefly for shade and ornament, to be found near villages and temples, and in roadside avenues. Among these are:

The Banyan, *val*, *Ficus indica*; the *pimpal*, *Ficus religiosa*; the wild fig tree, *umbar*, *Ficus glomerata*; the *bel*, *Ægle marmelos*; the *mándruk*, *Ficus retusa*; the *nim*, *Melia azadirachta*; the *karanj*, *Pongamia glabra*; the *satrin*, *Alstonia scholaris*; the *pángára*, *Erythrina indica*; the silk cotton tree, *sherari*, *Bombax malabaricum*; and the beautiful bastard teak tree, *palas*, *Butea frondosa*.

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Trees.
*Cesses on Fruit
Trees.*

*Sacred and
Ornamental
Trees.*

Chapter II.

Production.

Firewood.

The supply of firewood throughout the district is obtained chiefly from the silk cotton tree, *Bombax malabaricum*; the *pángára*, *Erythrina indica*; the *kájra*, *Strychnos nux vomica*; the *bel*, *Ægle marmelos*; the *áuli*, *Phyllanthus emblica*; the *chápa*, *Michelia champaca*; the *karanj*, *Pongamia glabra*; the *satvin*, *Alstonia scholaris*; the *kandul*, *Sterculia urens*; and other trees and shrubs too numerous to mention. The *ain* and the *kinjal*, *Terminalia tormentosa* and *paniculata*, are the principal sources of the *ráb* or ash manure used in agriculture throughout the district. The salt marshes also produce several species of mangroves which are sold from time to time on behalf of Government and are useful for firewood.

SECTION III.—DOMESTIC ANIMALS.

Animals.

Domestic.

The live stock reared in the district are of very inferior breeds. The pasturage is, both inland and on the coast, poor and devoid of nutriment. No Indian millet, *jurári*, *Sorghum vulgare*, is grown, and the straw of the *náchni*, *Eleusine corocana*, is but a poor substitute. Except during the latter months of the rainy season, green fodder is not procurable, and *haráli* grass, *Cynodon dactylon*, is scarce and difficult to get. The cattle are lean, ill-fed, and of stunted growth. Sheep imported from the grazing grounds above the Sahyádris very rapidly deteriorate, while horses, however well cared for, lose condition. Goats alone appear to thrive, but even they are of inferior breed and give but little milk. Buffaloes are of two breeds, the Jáfarabad and the country-bred, the former being held the more valuable and being scarce. Good milch buffaloes cannot be obtained, and if imported from the Deccan districts, give a reduced supply of milk. The average price of a country-bred she-buffalo is about £1 (Rs. 40) and of a bull £2 10s. (Rs. 25). A few Jáfarabad cows are also kept here and there as well as the country breed. The average price of country-bred bullocks is £2 (Rs. 20), and of cows £1 10s. (Rs. 15). Sheep are rarely kept, except near the larger towns, where there is a meat-eating population; and even where the consumption of mutton is considerable, sheep farming is an unprofitable speculation. Few if any sheep are bred in the district, the butchers' stocks being replenished, as required, by importations from the Deccan.¹ Sheep are kept by Musalmán butchers only, and the mutton is eaten chiefly

¹ Probably no sheep would ever come down into the Konkan, but for the fact that the Dhangars reap a rich harvest from money paid to pen and graze their flocks on the best rice lands in the valleys. The young shoots, after the rice has been cut, afford good pasturage, and the sheep droppings plentifully manure the ground before it is broken up by the plough. The Dhangar is usually paid in kind about 14 pounds ($\frac{1}{2}$ a *man*) of rice in husk a night for every hundred sheep penned on the ground. The Dhangars bring ponies and bullocks with them to carry the grain thus amassed which they trade for cash and at the end of the season they have usually saved a good round sum in cash, with which and their flocks they retreat to the Deccan in the monsoon. In the northern sub-divisions, Chiplun and Khed, the Dhangar having come down by the Kumbárh or other passes with large flocks, directly the rice lands are dry enough to bear a sheep's tread, graze their way along by Mahád, Roha, Nágothna, Pen, Kalyán, and Thána to the wholesale marts at the Bombay municipal slaughter houses at Bandora, where the whole flock is easily sold for a good price. Mr. A. T. Crawford, C. S.

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by such Maráthás and Musalmáns as can afford to pay for the luxury. All castes except Bráhmans, Shenvis, Jangams or Lingáyats priests, and Kásárs occasionally eat sheep and goat's flesh, though many will not do so openly; and the majority of the population are, except on great and special occasions, too poor to purchase meat. The average price of a full-grown sheep is about 8s. (Rs. 4). Goats are kept in every village throughout the district, and by all classes of the people. Bráhmans and Shenvis keep goats for milk only, while Maráthás, Kunbis, Musalmáns, Mahárs, Dhangars and others keep them for meat as well as milk. No care whatever is bestowed on the breeding of goats and they are permitted to graze, save where there are standing crops, unrestrictedly over rice stubble and hill sides alike, the latter notwithstanding their rocky and unpromising appearance and scanty herbage, affording ample means of sustenance. He-goats sell for 6s. (Rs. 3) and she-goats for about 4s. (Rs. 2). As might be expected, Ratnágiri is not a horse-breeding district, and very few horses are kept even by the more wealthy natives. Except on the main lines of road, riding is usually a slower mode of progression than walking. The rugged paths from village to village, strewn with laterite boulders, and plateaux of slippery sheet rock, are frequently impassable for horses, or at least so difficult and dangerous to man and beast, that the attempt is not worth while. The higher Government officials, Mámlatdárs, and others whose duty compels them to travel from place to place, very rarely keep ponies, preferring the greater ease and safety, and perhaps equal speed of the country *doli*, for which, from amongst the Kunbi class, bearers can be easily procured in every village. The Kunbi bearers, long used to such work, carry the *doli* or *pálki* on their heads by means of cross bars attached to the main pole, and do not carry the pole on the shoulder, as is the custom of professional *Hamáls*. Although they do not attain the speed and precision of the latter, they are decidedly safer and less liable to slip in going over difficult places. Donkeys are rarely kept and the few that are found are mostly the property of vagrant tribes. There are no camels.

The following statement shews the number of animals returned for each sub-division of the district for the year 1877-78 :

Ratnágiri Stock Return, 1877-78.

SUB-DIVISION.	Bullocks.	Cows.	He buffaloes.	She buffaloes.	Horses.	Mares.	Foals.	Goats and Sheep.
Málwan	22,466	12,589	7531	3901	39	11	1	3946
Devgad	36,813	24,917	6563	5950	37	18	..	7617
Ráápur	28,752	24,870	3273	6150	29	9	..	9093
Ratnágiri	19,533	13,359	2082	3658	33	5	..	4292
Sanjameshwar	10,652	9533	1517	1909	40	5	..	5715
Chiplun	29,673	20,607	5138	5503	52	12	1	6233
Khed ...	16,270	12,319	3727	3294	8	..	..	2779
Dapoli ...	22,489	16,399	3831	4478	53	14	1	6320
Total	196,618	134,593	33,468	35,243	296	74	3	46,055

Except Bráhmans, Shenvis, Parbhus, Lingáyats, Gujars, Bhátíás, Márvádís and Kásárs, all castes keep poultry. At the same time

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the presence of cocks and hens about a house is usually a sign of scanty means ; for the well-to-do invariably break up their poultry yard as soon as the profits derived from it are no longer a matter of importance. Poultry are kept for profit only, and never for pleasure or ornament. Two breeds of fowls are ordinarily met with, the Surat, and the country-breed, the former being greatly superior in size. The average price of a Surat cock is 2s. (Re. 1) and of a hen 1s. (8 as.) Country-bred cocks and hens are worth respectively about 1s. (8 as.) and 6d. (4 as.) In a few large towns ducks are kept, but not to any extent. Geese, turkeys and guinea-fowls are seldom, if ever, seen, except near the houses of European residents. They can, at very moderate prices, be bought from Goanese breeders, who from time to time visit the district with young stock. As a consequence of the recent establishment of a regular thrice-a-week line of small steamers touching at all ports, agents from Bombay come and buy poultry and eggs for the Bombay market, taking away from one port sometimes as many as three or four thousand eggs. These supplies are now daily advancing in value and they will soon range little below Bombay rates.

SECTION IV. — WILD ANIMALS.

Wild.

The Ratnágiri district, with but few forests of any size, and most of these situated on the precipitous slopes of the Sahyádrí range, is from the sportsman's point of view, essentially a poor district. Large game such as Tiger, Sámbur and Bears are scarce and their haunts more or less inaccessible. To obtain Bison the boundary of the district must be overstepped. Panthers are not uncommon, but little help in finding them can be expected from the villagers, who as a rule are totally without experience or ambition in the matter. In the southern sub-division until about fifteen years ago, panthers used to be very common, and from their familiar way of frequenting villages in pursuit of dogs, cats, and goats, were called village tigers, *gámti vághs*. One village from its great number of panthers was called Vághotan. Of late the villagers have exterminated panthers by firing the hill sides, where among the boulders the panthers had dens. Wild Boars are plentiful in suitable places ; but from the nature of the ground, hunting them on horse-back is impossible. Similarly, though Hares, Jackals, and Foxes, inhabit the steep rocky hills, coursing is, if not an impossible, at least an unsatisfactory sport, dangerous alike to man, horse, and dog. Two species of Deer and Antelope are found, and these alone perhaps of all the four-footed game in the district repay pursuit.

On the other hand, from a naturalist's point of view, the district is not without interest ; several families such as the Rodents and the Cheiroptera are well represented, and afford a hitherto but imperfectly explored field. The following is a list of the principal animals found in the district, classified in the order given in Jerdon's Mammals of India.

Order—**PRIMATES.**

PRIMATES.
SIMIADÆ.

Fam.—SIMIADÆ. The Monkeys or Simiadæ are represented by (1) a species of Langur, probably *Presbytis* or *Semnopithecus entellus*,

the *Hanumán* or *vānar*, and (2) the little Macaque or Bonnet monkey, *mākad* or *keltē*, *Macacus radiatus*. The latter is readily distinguished from its various congeners by a cap of long hair resting flat on the crown. This wig, which is very frequently parted down the middle, either by accident, or perhaps through vanity, gives its possessor a very knowing and human appearance. Both species are plentiful and distributed universally throughout the district; but the Langurs are perhaps more often seen, as they affect the neighbourhood of large villages and towns, while as a general rule the bonnet monkeys prefer the wilder forests and more secluded haunts. Both species are equally mischievous when occasion offers. The natives rarely take any steps to stop their depredations or punish the marauders, preferring with characteristic patience to submit to the removal of the tiles or thatch from the roofs of their houses, and the plunder of their gardens and granaries. Occasionally, an old male Langur, who, by reason of his general incompatibility of temper and tyrannical disposition, has, as a strong but necessary measure, been ostracised by the unanimous voice of his tribe, and compelled to lead a solitary and morose life, vents his ill-temper by frightening women and children, and making himself generally obnoxious in the village. The assistance of a European officer is sometimes sought to shoot rogue monkeys¹ of this description; but such instances are rare and the case must be hopelessly incurable, before such aid is sought. It is a common belief amongst the Konkanis that a gun which has once shot a monkey can never again shoot straight. The Kátkaris, a wild forest tribe, who subsist almost entirely by hunting, now that their more legitimate occupation of preparing catechu, *kāt*, has been interfered with, habitually kill and eat monkeys shooting them with bows and arrows. In order to approach within range, they are obliged to have recourse to stratagem, as the monkeys at once recognise them in their ordinary costume. The ruse usually adopted is for one of the best shots to put on a woman's robe, *sāri*, under the ample folds of which he conceals his murderous weapons. Approaching the tree on which the monkeys are seated, the disguised *shikāri* affects the utmost unconcern, and busies himself with the innocent occupation of picking up twigs and leaves. Thus disarming suspicion, he is enabled to get a sufficiently close shot to render success a certainty. Both the Langur and the Bonnet monkeys can be easily tamed, but the latter are far more lively and interesting pets than the former.

Sub-Order—Chiroptera are represented by the common Flying Fox or Fruit Bat, *vad vagul*, or *dhámka*, *Pteropus medius*, or *P. edwardsii*, as it is usually, but erroneously styled; one species of Vampire bat, *Megaderma lyra*; and three or four other small bats. Flying Foxes are exceedingly plentiful. They feed chiefly on the fruit of the various fig trees, and of the *undi*, *Calophyllum*

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CHEIROPTERA.

¹ I remember a rogue monkey of enormous size at the Godi or Dock village near Vijaydrug, who actually assaulted single men passing near his haunts, wrested sticks from them, bit them severely and was even accused of having tried to rape a woman. At last, the whole neighbourhood assembled and surrounding his haunts with stout fishing nets drove him into them and clubbed him to death. Mr. A. T. Crawford, C. S.

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inophyllum, and do a considerable amount of damage. They are also accused of drinking the fresh juice of the cocoanut from the vessels or gourds hung up to receive it, and in some coccanut gardens gins are habitually set to catch the thieves.

Order—INSECTIVORA.

INSECTIVORA.

The common musk rat, *Sorex cærulescens*, is common everywhere, but no other representatives of this order have hitherto been observed in this district.

Order—CARNIVORA.

CARNIVORA.

URSIDÆ.

Fam.—URSIDÆ. The Indian Black or Sloth Bear, *asval*, *Ursus* or *Melursus labiatus*, is within the limits of this district occasionally seen on the western slopes of the Sahyâdri range during the cold season. It is generally believed that during the hot months of March, April, and May, when only are the forests sufficiently thin for the pursuit of large game, most of the bears cross the watershed to the cooler regions of the upper Sahyâdri, *Ghât Mâtha*, where also they can obtain a richer supply of their favourite food, the fruit of the wild fig tree, *umbar*, *Ficus glomerata*.

LUTRIDÆ.

The Badger, Weasel, and Marten families, *Melididæ* and *Mustelidæ*, have no representatives in the district; but the common Indian otter, *ut*, *Lutra nair*, is plentiful on all tidal creeks and backwaters, and affords excellent sport when found in shallow water or on the mud banks of the creeks. During the heat of the day they repose under the thick cover of the mangrove trees and other bushes, which grow on the swamps of the tidal creeks, and start forth shortly before sunset in parties of four or five to fish in the open rivers. The native fishermen seldom molest them, and until fired at frequently, they are comparatively fearless, diving and gambolling all round the boats. When alarmed, if cover is available on the banks of the river, they will instantly leave the water; if not, they endeavour to elude pursuit by long dives and clever doubles. For the sport, at least two small canoes well manned and handled, and able to turn rapidly, are necessary, besides a complement of two or three beaters on foot on either bank of the river.

FELIDÆ.

Fam.—FELIDÆ. The Tiger, *vâgh*, *Felis tigris*, is scarce, and is seldom seen away from the dense cover of the Sahyâdri range. Panthers, *biblya*, *Felis pardus*, of small size are found all over the district in hill and temple forests, preying on goats, dogs, small cattle, and occasionally entering houses. They are seldom shot, the Konkanis, as a rule, being very indifferent sports-men, quite unable to beat a forest with any method and precision, much less to track and mark down large game. Hunting Leopards, *chittâs*, *Felis jubata*, are, it is believed, found occasionally in the Sahyâdri range; but they are rare visitants. The only other members of the cat family are the Leopard Cat, *Felis bengalensis*, exceedingly rare and confined to the Sahyâdri range, and the Common Jungle Cat, *bâul*, *Felis chaus*, found everywhere, and a very regular nocturnal visitor to every district camp.

Fam.—VIVERRIDÆ. The Striped Hyæna, *taras*, *Hyæna striata*, is common, and the steep rocky hills of the district are peculiarly favourable to its existence. A species of Civet Cat, *kastûri* or *jorâdi mânjar*, *Viverra malaccensis*, is found in the district, and when the anal pouch has been at once extracted, its flesh is said to be eaten and esteemed by the Maráthás, Kunbis, and other castes. The Common Tree or Toddy Cat, *manûri* or *kândechar*, *Paradoxurus musanga*, is distributed generally. It is a great pest to poultry-keepers, destroying out of apparently mere wantonness every fowl it can lay hands on, without any regard to its actual requirements or appetite. It also robs fruit trees and has a decided liking for palm toddy. The *Mungus*, *Herpestes griseus*, is also exceedingly common everywhere.

Fam.—CANIDÆ. The Jackal, *kolha*, *Canis aureus*, and the Indian Fox, *kokad*, *Vulpes bengalensis*, are both common. Wolves are unknown, but packs of Wild Dogs, *kolsinda*, *Cuon rutilans*, have been seen in the Sahyâdri range, and are well known to the hill peasantry, who have many wonderful tales as to their destruction of tigers.

Order—RODENTIA.

Omitting the *Cetacea*, which order is probably represented by the Plumbeous Dolphin, *Delphinus plumbeus*, and the Indian Fin Whale, *Balœnoptera indica*, the Rodents according to Jerdon's classification, come next. Of these the chief representatives are (1) the Bombay Red Squirrel, *Sciurus elphinstonei*, only found in thick forests in the Sahyâdri range: (2) the Common Squirrel, *khâruti*, *Sciurus palmarum*, universally distributed: (3) the Porcupine, *sâlu*, *Hystrix leucura*, rare: (4) the Common Hare, *sisa*, *Lepus nigricollis*, and several species of Rats and Mice, including the giant of the family, the Bandicoot, *ghus*, *Mus-bandicota*. Hares are not nearly so plentiful in this district as in the Deccan, and owing to the ruggedness of the country, coursing is a sport which affords little amusement and some danger.

Order—UNGULATA.

The sole representative of this order is the Indian Wild Boar, *dukar*, *Sus indicus*, found both in the Sahyâdri hills and near the coast, in brushwood overhanging the tidal creeks. During the hot months and at low tide, the pigs in the vicinity of the creeks habitually resort to the mangrove swamps, *khâjans*, where they wallow for hours together. In such situations hog hunting from horseback is impossible, as indeed it is throughout the district. The pigs of this district are like the cattle, a lean lanky race, sharing in the general poverty and dearth of nourishing food, contrasting very unfavourably with their sleek sugar-fed brethren of the Deccan. They do a large amount of mischief. Native sportsmen hunt them perhaps more than any other animal, but the pig, as a rule, hold their own, and wherever there is thick forest, their number does not seem to diminish. Native beaters have a very wholesome fear of the species, and take care to give a very wide berth to a full grown boar,

Chapter II.

Production.

Animals.

Wild.

VIVERRIDÆ.

Canidæ.

RODENTIA.

UNGULATA.

SUIDÆ.

Chapter II.
Production.

Animals.
Wild.

Tribe—RUMINANTIA.

RUMINANTIA.

knowing by experience that if his chosen path be blocked, the boar though unwounded, will usually elect to charge rather than to retreat.

The Ruminants found within the limits of the district are: (1) the *sāmbur*, *Rusa Aristotelis*, restricted to the Sahyādri range and difficult to obtain; (2) the Spotted Deer, *chital*, *Axis maculatus*, also restricted to the dense Sahyādri forests and seldom seen; (3) the common Rib-faced or Barking Deer or Muntjac, *bhekra* or *jangli bakri*, *Cervulus aureus*, as distinguished from the Four-horned Antelope, *Tetracerus quadricornis*, also called *bhekra* by the Maráthas, sparingly distributed throughout the district in the thicker hillside forests, from the coast to the summits of the Sahyādri range; (4) the Mouse Deer, *pisora*, *Meminna indica*, restricted to the Sahyādri forests and but seldom seen, looking when put up more like a hare than a deer from its elevated hind quarters and diminutive size; (5) the Four-horned Antelope, *bhekra*, *Tetracerus quadricornis*, generally and plentifully distributed, found alike in thick and thin forest rocky and almost barren hills and dense groves, wherever the low bushes on which it feeds give sufficient herbage. Bison, *gava*, *Gavaeus gaurus*, may possibly on rare occasions stray within the limits of the district, but they cannot be properly included in the list. One or two herds range along the Sahyādris; but they keep to the more level portions of the crest, *Ghāt Málha*, and have not been known of late years to cross the watershed. The *nilgai*, *Portax pictus*, is unknown within Ratnágiri limits. Of the deer mentioned above only two species, the Barking Deer, *Cervulus aureus*, and the Four-horned Antelope, *Tetracerus quadricornis*, are found in sufficient numbers and in sufficiently accessible places to repay the trouble of shooting them. The venison of both species is excellent, and in a district where mutton is scarcely obtainable, and a fish and fowl diet is a matter of necessity, it is all the more appreciated. These two species are to the Konkan, what the Black buck, Antelope *bezoartica*, and the Gazelle, *chikára*, *Gazella benettii*, whom they replace, are to the Deccan. Owing to the name *bhekra* being applied indiscriminately to both species, they are, though utterly distinct, very frequently confounded, and more especially the does. The horns of the Muntjac buck, *jangli bakri*, have their bases or pedicles covered with hair for some inches up, and are rough and wrinkled, while the does have in the place of horns bristly tufts of black hair. On the other hand the true Four-horned Antelopes, *bhokás*, have in the bucks two pairs of smooth horns, the posterior pair being considerably shorter than those of the Muntjac, and not covered with hair at the base, and the anterior pair being mere bony knobs, never more than an inch and a half long. The does of this species have, like the Muntjac does, no horns; but the bristly tufts are wanting; and the canine teeth, conspicuously long in the upper jaws of the Muntjacs of both sexes, are altogether wanting in the female four-horned antelope, and are comparatively much shorter in the male.

SECTION V.—SNAKES.

Chapter II.
Production.
Snakes.

The district is everywhere more or less infested with snakes, both venomous and harmless, but they are perhaps more plentiful in the Rájápur and Devgad sub-divisions than elsewhere. Both species and individuals are numerous, and the barren rocky hills, little frequented by man, and giving innumerable hiding places, specially favour their existence. The mortality from snake-bite is always exceptionally large in this district, as compared with others in the Presidency. In 1856 no less than 257 deaths were recorded: in 1872, 108: in 1873, 122: in 1874, 102: in 1875, 144: in 1876, 123 and in 1877, 103. Large sums have been disbursed by Government from time to time in rewards for their destruction, but as yet there has been no very marked diminution in the number of deaths.¹ In 1875, 62,780 snakes were destroyed at a cost of £197 9½d. (Rs. 1970-6-6); in 1876, 140,828 snakes were killed for £441 15s. (Rs. 4417-8), and in 1877, 75,899 for £238 13s. 8½d. (Rs. 2386-13-6).² It is observable that the mortality from snake-bite is much larger during the rainy months than at other periods of the year. It is known that snakes are more active, and secrete a greater quantity of venom during wet weather than during the dry season. The long grass found on all hill sides and waste places, during the latter rainy months, renders the detection of snakes more difficult than at other times of the year. It is probable that in many cases the heavy rain drives snakes into human habitations for shelter and in pursuit of the rats, mice, and frogs, which during these months abound. During times of scarcity and failure of crops, the poorer villagers in some parts make a regular occupation of snake-hunting for the sake of the rewards. Going out in small parties of two to three men, they turn over stone after stone on the rocky hill sides in search of their prey. After a successful day's hunt, a basket of from forty to fifty snakes, consisting with but few exceptions of the *Farsa* species, *Echis carinata*, will be despatched to the nearest Mámlatdar's station. There are no professional snake-charmers among the regular inhabitants. Here and there a Maratha or Kunbi acquires some dexterity in catching snakes alive and handling them, and having learnt to repeat at the same time a few incantations, professes to be able to make snakes bend to his will.

¹ In 1856 (29th October), on account of the very high death-rate from snake-bites, Government on the suggestion of Mr. Bettington, Police Commissioner, agreed to offer rewards at the rate of 1s. 6d. (12 as.) for a cobra and 1s. (8 as.) for other venomous snakes. A month later (28th November) Mr. Bettington, on tour in Ratnágiri, found the people taking to snake-killing with alarming zeal. Leaving all other work, they soon became experts, and every day brought hundreds of snakes to the Mámlatdar's station. The cost was serious, and he suggested that for all but cobras, the rewards should be reduced to 3d. (2 as.). The reduction was made, but the slaughter of snakes continued so active and proved so costly, that on December 10th, the Magistrate stopped all rewards except for cobras. In eight days (December 2-10) at a reward of 3d., a snake, 115,921 snakes were killed, and of this total, nearly one-half (50,476) were in one sub-division. In about a fortnight over £2040 (Rs. 20,400) were spent in rewards. Deaths from Snake-Bites in the Bombay Presidency, 29th April 1872. Bom. Gov. Res. Genl. Dep. 78 of 1872.

² The present (1879) rate of rewards is 3d. (2 as.) for a cobra and 3d. (6 pies) for other sorts of poisonous snakes.

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Production.

Snakes.

Hitherto no exhaustive scientific examination has been made of the various species of snakes found in the district, and it is therefore impossible to give a complete list, or to identify more than a few of the commoner kinds. Moreover the vernacular names are hopelessly confusing. Several species of entirely distinct families are frequently classed together under one name and the ignorance and superstitions which prevail amongst the natives with regard to snakes, render their statements, even as to the simplest matters of fact, misleading and unreliable.

The following is a list of the best known species found in the district :

HARMLESS
COLUBRINE
SNAKES.*Pythonidæ.*

PYTHONIDÆ. — The Indian Python, *ár*, *Python molurus* (L.), is occasionally but very rarely seen in thick forests and groves. Very exaggerated accounts of its size and power are given by natives. It is popularly believed to kill both men and cattle by constriction. Its length is stated by Dr. Nicholson¹ to be from ten to twenty feet. In addition to the *ár*, the natives distinguish another variety of Python, by the name of *chitei*. The two snakes, however, are identical.

Erycidæ.

ERYCIDÆ. — The Black Sand Snake, *dotunda*, *Eryx johnii*, (Russell), or a closely allied species, the Red Sand Snake, *Gongylphis couicus* (Schneider), is found here and there, but is not common. The name *dotunda* or double head is derived from the short thick tail of this snake, which is mutilated by snake charmers, so as to make it resemble a second head. This species is said to grow to about four feet, of which the tail is only one-twelfth.

Oligodontidæ.

OLIGODONTIDÆ. — Several species of filletted ground snakes are found, two of which have been doubtfully identified as *Oligodon subgriseus*, (D and B), and *Sinotes Russellii*, (Daudin).

Lycodontidæ.

The Lycodon, *Lycodon aulicus* (L.), a harmless species, is not uncommon. In its colouring it bears some resemblance to the venomous *Krait*, and is one of the several species which the natives unite under the name of *manyár*.

Colubridæ.

COLUBRIDÆ. — The Rock Snake, *dháman*, *Ptyas mucosus* (L.), is abundant throughout the district. It is found on the edges of rice fields, grassy hill sides, and frequently about haystacks. It preys chiefly on rats and field mice, and is usually seen in pairs. It grows from seven to eight feet in length. The name *dháman* is applied to this snake by Muhammadans and Maráthás alike. Natives also frequently call this snake the *ádhele*, a term applied, it appears, in other parts of India to the Hamadryad, *Ophiophagus elaps* (Schlegel). But the common belief is that the *ádhele* is distinct from the *dháman*, and a smaller species. If so it may possibly be the slender *dháman*, *Ptyas korros* (Reinw). This latter species, however, has not yet been identified, and its occurrence is very doubtful. The natives have a superstition regarding the *ádhele*, that its bite is dangerous to man on a Sunday, but not on any other day of the week.

¹ Elementary Treatise on Ophiology. 50.

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 Snakes.

The Checkered Snake, *púndival*, *Tropidonotus quincunciatus* (Schlegel), usually called the water-snake, is found throughout the district, frequenting ponds, river-beds and water-courses. Frogs are its chief food, but now and then one may be seen swimming along the surface of a river or pond with a fish in its mouth. This species grows to about four feet, and is one of the very few snakes which the natives admit to be harmless.

The Green Ground Snake, *Tropidonotus plumbicolor* (Cantor), is also common about Ratnágiri and is believed by natives to be venomous.

DRIOPHIDE.—The Common Green Tree or Whip Snake, *sarpatoli*, *Passerita mycterizans* (L.), not common in this district, but found occasionally, is frequently seen in a snake-charmer's collection. It attains a considerable length, the attenuated tail being nearly as long as the body. It has a peculiarly pointed snout. It is generally believed by natives to attack the eyes of travellers passing under the trees it infests; but is perfectly harmless.

Driophida.

DIPSADIDE.—The common brown tree-snake, *Dipsas Gokool* (Gray), is also found throughout the district. It is one of the many species indiscriminately called *manyár* by the natives, and erroneously believed to be venomous.

Dipsadula.

Many other species of harmless Colubrine Snakes, no doubt, occur, and are distinguished by the natives by special names; but their identity has not hitherto been clearly established.

ELAPIDE.—The Cobra, *nág*, *Naja tripudians* (Merrem), of the spectacled or monocellate variety, is found everywhere, although not often seen owing to its nocturnal habits. It affects human habitations more, perhaps, than any other species. Many superstitions are current amongst the natives as to its cunning and revengefulness. It is believed that a cobra, if accidentally or purposely hustled out of the path it is taking or the spot it is resting in, will follow the aggressor for miles by land and water, until it can find a favourable opportunity of inflicting its deadly bite, and that it will easily and unerringly identify its enemy amongst a crowd. As an instance, a story is told of a Bráhmaṇ, who was travelling along the coast road from Guhágar to Dábhól. Shortly after leaving Guhágar, he met a cobra on the road, and the cobra was compelled, though not molested, to turn aside and make room for the traveller who continued his journey. The revengeful reptile followed the man, gliding swiftly and unobserved behind him for some six miles, until they reached the Váshishti river. There the man crossed the creek in the ferry boat, a passage of upwards of a mile, and on landing at Dábhól proceeded to a rest-house, where he passed the night with some fifty other travellers. The wily cobra swam the creek after the ferry boat, followed the man to the rest-house, concealed itself until sleep had overtaken the travellers; and then gliding swiftly to its innocent and unsuspecting victim, wreaked its horrible revenge.

VENOMOUS
 COLUBRINE
 SNAKES.
Elapide.

The Hamadryad, *Ophiophagus elaps* (Schlegel), has not hitherto been found in this district.

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Snakes.
VENOMOUS
COLUBRINE
SNAKES.

Of the genus *Bungarus*, neither the *Kmit*, *B. cœruleus* (Schlegel), nor the Malayan *Bungarus*, *B. fasciatus* (Schlegel), is known with certainty to occur; but it is possible that one of the two species does so. Some specimens called *munyâr*, sent from Mahâbaleshvar for examination to the Grant Medical College, Bombay, were declared venomous,¹ and a *munyâr* found in Ratnâgiri was subsequently declared identical with the Mahâbaleshvar *munyâr*. The species though pronounced venomous was not, it appears, discriminated. The description given by Dr. G. C. Bell of the Mahâbaleshvar *munyâr* seems to correspond, as far as it goes, with *B. fasciatus*. He observes that 'those caught in dark localities and with the skin recently cast present a much darker appearance, and the cross bars are white and destitute of the yellow colour observable in older skins.' According to the natives, there are three varieties of *munyâr*, which they distinguish as the *dhâniâ*, the *gansi*, and the *kadboli munyâr*. Of these the *gansi* is the largest, and the *kadboli* the smallest. Possibly the *gansi* is a true *Bungarus*, and the others distinct species of harmless colubrine snakes. For instance, *Lycodon aulicus*, *Simotes Russellii*, and *Dipsas Gokool* are frequently called *munyârs*. Most natives are familiar with names as names; but very few can apply them with any confidence to particular specimens. As regards the *dhâniâ* and the *kadboli* it is commonly believed that they never use their teeth as weapons of offence. To account for injuries said to be inflicted by them, the *kadboli* is supposed to wound with its tongue, while the *dhâniâ* has an unfortunate habit of causing certain death to human beings, by merely casting its shadow over them from a tree or the roof of a house. The *gansi munyâr* alone is credited with the possession of poison fangs.

VIPERINE
SNAKES.
Viperula.

VIPERIDE. — The Chain Viper, *ghonas* or *kandar*, *Daboia elegans* (Russellii, Gray), the well known Cobra de Manilla² of the Indo-Portuguese, corresponding with the *Tie Polonga* of Ceylon, is found throughout the district. It is conspicuously marked with three rows of white-edged oblong brown spots. It grows to a length of about five feet, has very long and formidable fangs, is of thick build, and somewhat slow and sluggish in its movements. It preys on rats and occasionally attacks and kills sitting hens. The bite of this viper is highly dangerous. The natives, as usual, distinguish three varieties of *ghonas*, the *dhâniâ*, the *fakia*, and the *kusâla*. The *dhâniâ* is the true *Daboia elegans*, and the term is very appropriate to the species, having reference to its handsome bead-like markings. A specimen of a snake called *fakia ghonas* by the natives, was, after examination at the Grant Medical College, doubtfully identified as *Coluber lachesis*. The third and smallest variety, the *kusâla ghonas*, so called from the effects produced by its bite, a sloughing of the bitten part as in leprosy, is probably only another name for the *farsa*, *Echis carinata*. The snake which the natives call the *kandar* is probably the full grown *Daboia*, the name of *dhâniâ ghonas* being applied to

¹ Gov. Res. Finl. Dept. 4528 of 1873.

² The name Cobra de Manilla is corrupted from *Cobra monil* or *Coluber monilgor*.

younger and smaller specimens. Vipers of sufficient size to be called *kándurs* are very rare.¹ The following description of the *kándur* by Dr. E. de Crespigny, late Civil Surgeon, Ratnágiri, seems to point conclusively to its identity with the *Daboia elegans*. It is described as a large reptile, five or six feet in length when full grown, of an olive colour, marked with large oval regular well-defined brown spots; large flat triangular head covered with scales; fangs immense. The effects of the *kándur's* bite seem to shew themselves immediately, and from the reports of the native police, it appears that congestion of the lungs with hæmoptysis invariably occurs, followed by coma and death. A man, reported to have been bitten in the early morning, went to sleep again, and awoke with oppression of the chest, difficulty of breathing, eyes sunken, head heavy, viscid phlegm hawked up, and described as being very tenacious and capable of being drawn out six or eight yards without parting, this latter symptom being considered a certain sign of *kándur* bite. In another case, a woman bitten by a *kándur* suddenly became insensible and vomited black blood.

The *fúrsa*, *Echis carinata* (Schneider), is by far the commonest species of venomous snake in the district, and is identical with the 'Kapar' of Sind. It is abundant on all rocky hill-sides, seldom venturing from under cover of rocks and boulders. From its diminutive size and dangerous bite, this snake is perhaps more dreaded than any other species. Seldom exceeding twelve to eighteen inches in length it can easily conceal itself, and even coil up unseen in a native shoe. When disturbed, it displays great activity and strikes with the utmost ferocity at the first object that presents itself. It may readily be distinguished from all other snakes by the peculiarity of its markings, consisting of a connected chain of white arches or semicircles on each side, cutting into a median or vertebral row of white spots, and by its strongly peeled scales, shieldless head, and vertical pupil. The body colour is in various shades of brown. The natives distinguish several varieties of *fúrsa*; but they are all referable to one species. The *fúrsa* is accountable for most of the yearly deaths from snake-bite. The action of the virus of this adder on the human system is peculiar, and the effects produced by it appear to differ from those of any other known species. The symptoms of *fúrsa* bite have been thus described. 'Slight pain in the bitten part with local œdema, increasing up to the third or fourth day, and then gradually subsiding; swelling of the neighbouring lymphatic glands; giddiness and heaviness of the head relieved by emetics and purgatives, and a marked tendency to hæmorrhagic diathesis as evinced by the troublesome trickling of blood from the bitten part when lanced, and from abrasions of the skin where these exist. In some cases there is also bleeding of the mouth. The average of 62

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Snakes.
VIPERINE
SNAKES.

¹ Report dated March 8th, 1862. I have seen several large chain vipers, and myself killed some which were immediately called *kándurs* by the natives. In the largest of the chain vipers the marks fade with age, and to some extent blend with the body colour. It is then, so far as I could gather, that the natives thinking them another species call them *kándurs*. Mr. A. T. Crawford, C.S.

Chapter II. Production.

Snakes. VITELINE SNAKES.

fatal cases gives death in $4\frac{1}{2}$ days. Ordinary fatal symptoms are, bleeding at the top of the upper gum, bleeding from new and half healed scars, bleeding from the bitten part, heaviness of the head, and lock-jaw, almost invariably. Bubo in the groin or arm-pit is another symptom. None of these, however, except lock-jaw are invariably fatal symptoms. The bleeding takes place at any time after the bite, from one to two hours afterwards, up to the seventh or eighth day.' Thus the action of a *farsa* bite is very slow as compared with other deadly snakes.¹ 'A man bitten by a cobra, after three or four hours' lethargy, sleeps quietly out of life. Another, bitten by a *farsa* lives from three to twenty days, his head quite unaffected, but with blood issuing from his eyes, nose, and mouth, and oozing through all the pores of his skin, and then an oppression of the chest comes on, from which he dies.'² The efficacy of ammonia in counteracting the effects of a *farsa* bite has been the subject of much discussion. Mr. Campbell, a former Superintendent of Police, found it effectual both at the early and later stages. On the other hand, Dr. E. de Crespigny, Civil Surgeon of the district in 1862, was inclined to the opinion that liquor ammoniæ was inert in these cases, and that in the instances of recovery from its use, recovery would have taken place as well without it. He mentions instances of sloughing of the fauces and obstinate vomiting having been induced by improper administration of ammonia, and adds that 'if long continued it is calculated to exaggerate all the peculiar hæmorrhagic symptoms observed in bad cases.' In 1861, out of 285 cases sixty-two deaths occurred from *farsa* bites. Of these sixty-two fatal cases, fifty-four were treated with ammonia. In the Ratnágiri Civil Hospital, a native remedy, the root of a herb called *pāngla*, has, for some years past, been used with success both internally and as a paste for external application to stop the hæmorrhage.

SECTION VI. — BIRDS.

Birds.

A great part of the Ratnágiri district is still, as regards its avifauna, almost a *terra incognita*, and but little is known with certainty as to the distribution of species within its limits. The geographical situation of the district would lead to the expectation of finding an intermingling of the typical forms of Central or Continental and of Southern or Peninsular India. The little experience that has been gained partially confirms this expectation. At present, this is little more than speculation, and the subject has yet to be worked out exhaustively. Careful comparisons of large series of specimens from different localities may perhaps hereafter lead to the discovery of many interesting intermediate forms, groups, and sub-species, more or less clearly distinguishable from the typical forms to which they most nearly approach.

On the whole the district cannot be said to be very rich either in species or individuals. With the exception of the Grallatores

¹ Dr. E. de Crespigny, Civil Surgeon, Ratnágiri, 8th March 1862.

² Mr. G. Campbell, Superintendent of Police, Ratnágiri, 13th April 1860.

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Birds.

and Insessores, the various orders are somewhat weakly represented. The absence of partridges, sandgrouse, bustards, and cranes, and the comparative dearth of quails makes the district an indifferent game country. On the other hand, duck, snipe, and golden plover are plentiful, and the alluvial banks of the tidal creeks, the mangrove swamps, salt marshes, and flooded rice fields afford feeding grounds to innumerable waders.

The diversified aspect of the country should give good opportunities for studying the distribution of species, as affected by physical conditions. Beginning from the sea, the first aspect is a rocky coast with numerous bays and indentations, fringed with coconut gardens and tidal estuaries, bordered by mangrove swamps and mud banks. Immediately above the sea beach succeeds a belt of low, rugged, laterite capped hills, and rocky plateaus for the most part bare, or but scantily clothed with low thorny bushes, intersected at irregular intervals by the deep precipitous ravines cut by the tidal rivers. Here with the exception of the village sites, which are more or less well covered with leafy trees, there is little or no verdure, and cultivation is chiefly confined to the alluvial banks of the rivers. Further inland, the country becomes more elevated, the hills more undulating and more thickly covered with brushwood and pollarded trees. Well shaded villages and luxuriant groves are dotted about, and the laterite is gradually replaced by trap. Lastly, the Sahyádrí mountains rise abruptly from the low lands at their base, with innumerable spurs and slopes richly clad with evergreen forest.

With so many and varied features, and with an elevation ranging from the sea level to upwards of 3000 feet, much diversity of animal forms and species might naturally be expected. The waders, swimmers, divers, and generally speaking all the aquatic and oceanic species are restricted to the coast and the broad tidal estuaries, extending inland only so far as the tidal wave exerts its influence up the various rivers. On the other hand, the birds of prey, with the exception of the fishing eagles, the pigeons, doves, and the great majority of the perchers, range throughout the district from the coast to the Sahyádrí hills. Amongst these are a few, whose habitat lies only in the higher ranges of the Gháts, and other species approach the coast only where spurs of the Sahyádris stretch, in a line of unbroken forest, westwards to the sea.

Though, compared with the northern Konkan and the Habsi territory on the north, and with Sávantvádi, Goa, and Kánara on the south, the Ratnágiri district presents a decidedly denuded appearance, till, as regards its ornithology, it is essentially a forest tract; and the prevailing species of birds are such as might be expected in a humid well-wooded forest country, rather than in bare open plains, such as are seen to the east of the Sahyádrí range. Of this the following are prominent instances. The common Ratnágiri paroquet is the Rose-headed species, *Palceornis purpureus*, the Rose-ringed Paroquet, *Palceornis torquatus*, being comparatively a scarce bird. Similarly, the common dove of the district is the Spotted Dove, *Turtur suratensis*, replacing entirely the Little Brown Dove, *Turtur*

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cambayensis. The Jungle Myna, *Acridotheres fuscus*, in great part replaces the Common Myna, *Acridotheres tristis*, and the Red-whiskered Bulbul, *Otocompsa fuscicaudata*, (Jerd. 160, *bis*) is almost equally as common in the well wooded tracts as the Madras Bulbul, *Molpastes haemorrhous*. Passing over the Sahyádrí range into the Sátára district, even within a few miles of the watershed the reverse is clearly seen. The species mentioned as common in Ratnágiri, are on the eastern side of the hills restricted to the immediate neighbourhood and the well wooded slopes and spurs of the Sahyádrí range. Further east, these species are entirely replaced by the Rose-ringed Paroquet, the Little Brown Dove, the Common Myna, and the plainer coloured Madras Bulbul. Many similar instances might be adduced. Numerous species, such as the Common Green Barbet, the Southern Yellow Tit, the White-winged Ground Thrush, the Green Bulbul, and other forest-loving birds are common throughout the Ratnágiri district. On the other hand, birds which more or less exclusively affect dry open plains, such as Sand grouse, Courier plover, Bustard, and others are either unknown, or so rare as to be seldom seen.

In the subjoined list of species the scientific names are, as far as can be ascertained, those fixed by the latest authority,¹ and in each instance the number, according to Jerdon's Birds of India, is added for convenience of reference. Species separated since the publication of that work are marked by the addition of *bis*, *ter*, or *quater* to the number given to the species, most nearly resembling them. The list containing 255 species must be more or less incomplete. But it is believed that, as far as it goes, it will be found accurate. All species of doubtful occurrence have been excluded and separately enumerated.

Order—**RAPTORES.**

RAPTORES.

This order is represented by four species of Vultures, three Falcons, one Hawk, five Eagles, one Buzzard (*Poliornis*), two Harriers, two Kites, and nine Owls. The true Buzzards have no representatives. The above are all that can at present be said with certainty to occur. But when the higher ranges of the Sahyádrí hills have been more thoroughly explored, it is probable that other species will have to be added. Many birds of prey are rare and occasional visitants, living in the most inaccessible hills and densest forests, seen with difficulty, and with still greater difficulty obtained for examination.

Vulturidae.

Fam.—**VULTERIDÆ.**—The Indian King or Black Vulture, *Otogyps edvus*, (Scop. Jerd. 2), is occasionally but rarely seen. It is not known to breed within the limits of the district.

The Long-billed Brown Vulture, *Gyps indicus*, (Scop. Jerd. 4), which will probably prove to be the paler variety or western form of *G. indicus*, separated by Mr. Hume as *G. palli-seens*, is plentiful in the large fishing villages on the coast, and may always be seen

¹ Tentative list of the Birds of India, Stray Feathers, VIII. 73 *et. seq.*, corrected up to 1st March 1879. Allan Hume.

feeding in company with the white-backed vulture. All along the coast are many breeding places, rocky cliffs and bluff headlands, such as this bird delights in. It seems to be a permanent resident, but its nest has not yet been discovered.

The White-backed Vulture, *Pseudogyps bengalensis*, (*Gen. Jerl.* 5), is by far the commonest vulture in the district, and is universally distributed. It breeds from December to February on the tops of lofty mango, silk cotton,¹ and other trees, generally in thick groves. The nests are large stick platforms with a slight depression lined with green mango leaves. A single white egg is laid, averaging $3\frac{1}{2} \times 2\frac{1}{2}$ inches. These vultures usually build in small colonies, two or three nests being often found on one tree. If their nests are invaded, they make no attempt to defend their young.

The White Scavenger Vulture, *Neophron ginginianns*, (*Dawl. Lath.*), *N. perenopterns* (*Lin. Jerl.* 6), the Dirt Bird or Pharaoh's Chicken, is seen in pairs here and there throughout the district, but is by no means plentiful. They breed at the same time and often in company with, and on the same tree as, the white-backed vulture, appearing to be on the best of terms with their neighbours, each taking an interest in the other's concerns. They usually lay two eggs, greyish white, more or less thickly blotched and speckled with dingy red. Konkani Maráthás call all vultures *gúth*, but dignify the dirt bird or scavenger with the more aristocratic name of *pándri ghár*, white kite.

Fam. — FALCONIDE. *Sub-Fam.* — FALCONINE. — The Peregrine Falcon or Bhyri, *Falco peregrinus*, (*Genl. Jerl.* 8), is, during the cold weather, occasionally seen on the coast, and on rocky islands off the mainland, such as Savarndurg fort. Here, as elsewhere, it is a rare bird.

The Red-headed Merlin or Turumti, *Chiquera falco*, (*Dawl. Jerl.* 16), is also rare, but is said to be a permanent resident. It is comparatively common in the adjoining Sátára district, where in January and February it breeds on mango and tamarind trees, laying from three to four eggs. These falcons are, when building, extremely noisy and vicious, attacking all intruders, such as crows and kites, with the greatest audacity.

The Kestrel, *Cerchæus fimmuculus*, (*Genl. Jerl.* 17), makes its appearance in small parties in October, at the beginning of the cold weather, and leaves about the middle of March. It is not so plentiful in this district as in the Deccan plains.

Major Lloyd in his general Konkani list gives in addition to the above the Shakin, *Falco peregrinator*, (*Sund. Jerl.* 9), and the Laggar, *Falco jugger*, (*Gray. Jerl.* 11), and in all probability they are to be found in this district; but the writer, having failed as yet to obtain specimens, has omitted them from the local list of falcons.

Sub-Fam. — ACCIPITERINE. — The Shikra, *Astur badius*, (*Genl. Jerl.* 23), is universally distributed and a permanent resident, breeding in March and April, usually laying in a very loosely constructed stick nest four pure unspotted eggs of a greenish white. No other hawk

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Vulturide.

Falconide.

Accipitrine.

¹ *Bombax malabaricum*.

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Aquiline.

is known with certainty to visit the district. It is possible that the Besra Sparrow Hawk, *Accipiter virgatus*, (*Tim. Jerd.* 25), occurs in the higher Sahyádris ranges. A straggler from a party of European Sparrow Hawks, *Accipiter nisus*, (*Lin. Jerd.* 24), may also now and then have been seen in the cold weather; but there is as yet no authentic record of its appearance.

Sub-Fam. — AQUILINE. — The Dwarf or Booted Eagle, *Hieraëtus pennatus*, (*Guil. Jerd.* 31), is rare. Specimens have been obtained by the writer in the Dápoli and Chiplun sub-divisions.

The Crested Hawk-Eagle, *Limnaëtus Cirrhatu*s, (*Guil. Jerd.* 35), is by far the commonest eagle in the district, and is universally distributed from the sea coast to the foot of the Sahyádris. Very destructive to poultry yards, it preys also on bush quail and has been seen pursuing green pigeon unsuccessfully from tree to tree. It also attacks and kills small snakes, though this latter occupation is probably exceptional. It is usually alone. The breeding season opens about the latter end of December and continues up to the end of April. They begin building early in December, taking like the Shikra a very long time about their work. Nests, apparently finished, are found some weeks before any eggs are laid. The nest is always placed on the fork of a tree, high up, and is a large loose structure of sticks, lined throughout with green mango leaves. A mango tree is usually chosen for the nest and it is noticeable that although there may be numbers of Pariah Kites, *Milvus govin*da, Bráhmání Kites, *Haliastur indus*, and other Raptors in the neighbourhood, the particular clump of trees chosen by the pair of crested hawk eagles is held by them as their exclusive property, and no trespassers are allowed to build anywhere near. The only exception to this, ever observed by the writer, was a pair of brown fish owls, who had reared a pair of young ones in a hole in a tree adjoining the tree containing the eagle's nest. The owls, being hidden by day, perhaps escaped the tyrant's notice. These eagles make no attempt to actively defend either young or eggs from human invaders, and appear to desert their nests, not only when robbed of eggs, but even if only looked at and examined before an egg has been laid. A single egg only is laid. Out of twelve nests found by the writer with eggs or young, no instance occurred of more. The eggs are greenish white and devoid of gloss, shewing a beautiful pale green lining when held up to the light. The average measurement of seven eggs taken by the writer was 2.65 by 1.91. The natives call this eagle the *Shanderi ghár*, in allusion to its conspicuous black crest.

The Lesser Indian Harrier Eagle, *Spilornis melanotis*, (*Jerd.* 39, *bis*), replaces in this district its well known and larger congener the Crested Serpent Eagle, *Spilornis cheela* (*Jerd.* 39). It is sparingly distributed throughout the district, generally frequenting hill sides and low brushwood, and is solitary in its habits. It is a permanent resident, and breeds in the hot weather. It is by Konkani Maráthás mis-called *Mhorekar ghár*, a name which applies more properly to the Crestless Hawk Eagle, *Nisaëtus bonellii*, (*Jerd.* 33). Snakes, lizards, and frogs form its chief food.

The Osprey, *Pandion haliaëtus*, (*Jerd.* 40), is common on the larger tidal creeks and estuaries, where fish are plentiful. Of its nest

building nothing is known. It is often seen in company with the next species.

The Greybacked Sea Eagle, *Haliaeetus leucogaster*, (*Gmel. Jerd.* 43), is found all down the seaboard of the district and for a few miles up the larger tidal rivers. It is a permanent resident, and breeds regularly year after year in the same nest in November and December. The nests are huge stick platforms five feet or more in diameter. They lay two white eggs, measuring about 3×2.06 inches. At all times, whether breeding or not, the nests are the homes and head-quarters of the sea eagles. Here they always return after each trip in search of food, and here also, both in and below the nest may be found the debris of their meals, snake bone and skins, fish bones, and occasionally, as the poultry keepers in the fishing villages well know, half-eaten domestic fowls. The ground below an old nest is always covered with a thick layer of bleached bones. They do not appear to be very particular in their choice of a building site. Any lofty tree with a strong horizontal branch suits their purpose. Sometimes they build in the mango trees, which shade the fisherman's huts, and sometimes in cocoanut gardens, though never on cocoanut trees. One pair has for many years past occupied a gigantic nest in a banyan tree, overhanging the sea wall of the picturesque old island fort of Suvarndurg. No more than one pair of adult birds is ever seen at this fort, and the young birds are, as soon as they can shift for themselves, probably driven off to seek fresh hunting grounds. The eagles usually hunt in couples, making short trips up and down the coast, beating up the shallow water on the sea-shore in quest of food. Both when perched and on the wing, they utter a loud, clear, resonant far-reaching cry. The native local name is *Kákani*.

Major Lloyd gives as Konkan species the following eagles: The Spotted Eagle, *Aquila clauca* (*Pall. Jerd.* 28); the Fawny Eagle or Wokháb, *Aquila vindhiana* (*Frankl. Jerd.* 29); the Black Eagle, *Neopus malaiensis*, (*Reinwardt. Jerd.* 32); the Crestless Hawk Eagle, *Nisus bonelli*, (*Tem. Jerd.* 33); the Common Serpent Eagle, *Circus gallicus*, (*Gml. Jerd.* 38); and the Crested Serpent Eagle, *Spilornis cheela*, (*Daud. Jerd.* 39). Any or all of these may occur in the Ratnágiri district, but they have not hitherto been recorded as found in any particular locality within the limits of the district. It may be observed that in all probability the Crested Serpent Eagle, or Harrier Eagle, *Spilornis cheela*, is replaced not only in Ratnágiri, but throughout the Konkan by the smaller race, *Spilornis melanotis* (*Jerd.* 39 bis), above described.¹

Sub-Fam. — BUTEONINÆ. — The White-eyed Buzzard, *Poliornis teesa*, (*Frankl. Jerd.* 48), has been obtained in the south and in Ratnágiri by Dr. Armstrong, and in Dápoli by the writer, but it appears to be scarce everywhere.

The Pale Harrier, *Circus macrurus*, (*S. G. Gm. Jerd.* 51), is abundant everywhere in the cold season. They come in October just when the Southern Crown Crest, *Spizalauda malabarica*,

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Birds.

Aquilinæ.

Buteoninæ.

¹ Since the above was written a specimen of *Spilornis cheela* has been obtained in Sávantvadi.

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Birds.

Buteoninae.

(*Jerd.* 765 *bis*), and the Little Finch Lark, *Pyrrhalanda grisea*, (*Jerd.* 760), are rearing their young broods on the bare rocky plateaus thinly covered with coarse grass. Numbers of young nestling larks, ill-hidden from their keensighted enemies, are destroyed by the harriers. By day they hunt either singly or in pairs, beating silently over plain and hillside for young birds, lizards, mice, and locusts. By night they gather in large parties, roosting on the ground, often under cover of long grass. Montague's Harrier, *Circus cineraceus* (*Mont. Jerd.* 52), probably visits the district in the cold season, but has not yet been obtained by the writer.

The Marsh Harrier, *Circus æruginosus*, (*Lin. Jerd.* 54), is also occasionally found in the cold weather, but is not common.

Milvinae.

Sub-Fam.—*MILVINÆ*.—The Maroonbacked or Bráhmāni Kite, *Haliastur indus*, (*Bodd. Jerd.* 55), is comparatively common on the coast, but is not often seen inland, or at any distance from water. Crabs appear to be its chief food. It breeds from January to April. On the coast, cocoanut palms are their favourite site. Inland they choose any large available tree, occasionally mangrove trees in mud swamps. They usually lay two eggs, white minutely speckled with reddish brown. They desert their nests on very small provocation, and at once begin building a fresh. They never make any active defence of young or eggs, but if their nest be invaded, fly round overhead in short circles. Once when the writer's birdnester had climbed a tree to examine one of their nests, an unfortunate screech owl, *Strix javanica*, flew innocently out of an adjoining tree, and was at once attacked with the greatest ferocity by both the parent kites, who vented their wrath on it by swooping at it, and striking viciously at its back, pulling out handfuls of feathers. The kites did not pursue the owl far, and their victim escaped a 'sadder and a wiser' bird. The Konkani name for this kite is *tám̄badi mhorangi*.

The Pariah Kite, *Milvus govinda*, (*Sykes, Jerd.* 56), is too well known to need description. No village is without them and all the natives have a wholesome hatred of them, for they do without doubt kill chickens, especially when they have young. They breed in January, February, and March, choosing any high tree, but generally a mango, and making the usual stick platform lined with rags and leaves. Two is the normal number of eggs, and the eggs vary greatly in colour, shape, and size, the commonest type being a dingy white ground thickly blotched at the larger end with red. They defend their eggs and young with great vigour, and the robbing of their nests is at all times a perilous undertaking. They dash at the intruder who climbs the tree, one on either side of him, flying opposite ways, striking at him as they rush past with wings and claws. Considerable nerve is required to repel these attacks, especially when, as usually happens, the tree is a difficult one to climb, and the birdnester's time is fully occupied in keeping his own balance. Pariah kites are called *ghár* or *Kobadi ghár* by the Konkanis.

Strigida.

Fam.—*STRIGIDÆ*.—The Indian Screech Owl, *Strix javanica*, (*Gmel. Jerd.* 60), is found here and there throughout the district, but is nowhere common. It is entirely nocturnal in its habits, and hides by day in holes of decayed trees and buildings. It breeds in December and January.

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Birds.
Strigidae.

The Brown Wood Owl, *Syrnium indrani*, (*Sykes. Jerd.* 63), has been procured by Dr. Armstrong at Fanasgaon in the Devgad sub-division. It appears to be rare, and has not been observed in the northern portion of the district where the next species, the mottled wood owl, is comparatively common.

The Mottled Wood Owl, *Syrnium ocellatum*, (*Less. Jerd.* 65), is found in the northern sub-divisions of Khed and Dápoli and Sangameshvar, and probably elsewhere, in suitable localities. As a rule it does not affect heavy forest, preferring mango clumps on the outskirts of villages. It is less common near the coast than inland. They nest in January and February in holes and depressions of trees, ten feet or so from the ground, laying two very spherical creamy white eggs. The young, if taken from the nest, become very gentle and good tempered, and will with great gusto devour lizards, grasshoppers, and cockroaches. Dogs are their greatest aversion. Whenever a dog enters a room or tent where are captive owls, the birds puff out all their feathers and lower their heads like angry turkeycocks, snapping their mandibles with great rapidity, and pretending to be very bold. They also readily learn to distinguish friends from strangers, and will snap and show evident signs of alarm on the appearance of a strange face. Entirely nocturnal, they take little notice of anything that happens by day. In confinement their wingbones become very brittle, and liable to fracture and dislocation.

The Rock Horned Owl, *Bubo bengalensis*, (*Frankl. Jerd.* 69), is found amongst rocky cliffs overhanging tidal creeks and mountain streams, and is rather common. It appears to perch on trees as well as on rocks, though when disturbed from a tree it always flies to the rocks. It comes out directly the sun is down, and is always on the alert and easily disturbed in the day time. It has a deep dissyllabic hoot, which may be syllabled *hoo! hoo!* the last syllable being prolonged. Rats, lizards and crabs are its chief food. The writer has seen one feeding on the remains of a peafowl, which he had wounded the evening before, but owing to the darkness, was unable to recover. It breeds in January or February on the ground, making no nest, but scooping out a hole in the earth usually under cover of a projecting boulder or ledge of rock, laying three or four, rarely five, round white eggs of the usual owl type.

The Brown Fish Owl, *Ketupa ceylonensis*, (*Gmel. Jerd.* 72), is common throughout the district. It affects thick forests and lofty trees always near water. Fish and crabs form its chief food. They thrive well in confinement, and will eat raw or cooked meat, the former by preference, as well as fish. They drink water freely and greatly enjoy a bath. This fish owl and the rock horned owl are both called *human* by the natives of the Konkan, the term *Ghúbad* being usually applied to the screech owl and the hooting or mottled wood owl. They breed from January to March in holes and depressions of trees, at no great height from the ground, laying usually two eggs. The nests have no lining, but are usually strewn with powdered bark. The cry of this owl is a long deep aspirated sigh, excessively human in its intonation. To those unaccustomed to it, and by nature superstitious, this repulsive laugh, as Tickell describes it, when heard close overhead in the dead of night, is an alarming sound.

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Birds.
Strigidae.

Bruce's Scops Owl, *Scops brucii*, (*Humé. Jerd.* 74 *sept.*), has been obtained by the writer at Khed. and will probably be found elsewhere, but it appears to be rare.

The Malabár Scops Owl, *Scops malabaricus*, (*Jerd.* 75. *quater*), a curious little horned owl, is throughout the district found in thick groves and cocoanut gardens. The natives call it *Kuta*, an imitation of its low soft call. It is strictly nocturnal, never appearing until after sundown. By day it hides in holes of decayed trees, and occasionally in crevices of dry wells. It is usually seen in pairs. They nest in January in holes of trees, laying three or four glossy white eggs almost spherical. Unlike other allied species, they are extremely gentle and timid, and if caught on their nests, make no attempt to retaliate by pecking or clawing. The young birds have a grey tinge all over their plumage, which turns with age to rufous.

The Spotted Owlet, *Carine brama*, (*Tem. Jerd.* 76), the well known *pinglu* of the Deccan, has been obtained by Dr. Armstrong at the Fonda pass, and on one occasion by the writer in the Dápoli sub-division. Its occurrence in these localities is perhaps exceptional, as it does not appear to have been found elsewhere. The spotted owlet is plentiful in the west of Sátára, and may here and there extend itself down the western slopes of the Sahyádris. From the base of the Sahyádris to the sea it appears to be almost entirely replaced by the next species.

The Malabár Owlet, *Glaucidium malabaricum*, (*Bly. Jerd.* 78), is found in a form pronounced by Mr. Hume to be intermediate between *Athene malabaricum* and *Athene radiatum*, the Jungle Owlet, and almost as near the latter as the former. It is plentifully distributed, and in the northern sub-divisions appears almost entirely to replace the Spotted Owlet, *pinglu*, *Athene brama* (*Tem.*), so common in the adjoining district of Sátára. The Malabár owlet is a lively little bird, and diurnal in its habits, flying from tree to tree, and uttering its clear tremulous whistling call at intervals throughout the day. It seldom hides itself in holes of trees, except during the breeding season, March and April, when it lays three or four round white eggs, undistinguishable from those of the preceding species. When caught or wounded it is extremely vicious, defending itself with its sharp claws with much vigour. The writer has seen this bird fly out from a tree in the full blaze of the morning sun, and make an unsuccessful sweep at a wounded tree-warbler, which had just been shot and was fluttering slowly to the ground. This species is by the natives called *kutanz*, a term also applied to the little Scops Owl, *kuta*, in the Deccan.

In his list of Konkani owls, Major Lloyd includes the Indian Scops Owl, *Scops pennatus*, (*Hodg. Jerd.* 74). This species appears to be entirely replaced in Ratnágiri by the Malabár Scops, (*Jerd.* 75 *quat.*) The Jungle Owlet, *Glaucidium radiatum*, (*Tuck. Jerd.* 77), is also given as a Konkani bird. As before mentioned, the owlet found in Ratnágiri has been pronounced to be the Malabár Owlet, *Athene malabaricum*, (*Jerd.* 78), or more strictly a form intermediate between *Athene malabaricum* and *Athene radiatum*.

The Grass Owl, *Strix caudata*, (*Tuck. Jerd.* 61); the Dusky Horden Owl, *Bubo coromandum*, (*Loth. Jerd.* 79); and the Brown Hawk Owl, *Ninox scutellatus*, (*Reijl. Jerd.* 81), have not hitherto been seen in Ratnágiri.

Order — INSESSORES.

The large and various order of the Perchers comprising the swallows, goatsuckers, bee-eaters, rollers, kingfishers, hornbills, parrots, woodpeckers, barbets, cuckoos, honeysuckers, hoopoes, shrikes, minivets, drongos, flycatchers, thrushes, babblers, bulbuls, orioles, robins, chats, wrenwarblers, treewarblers, wagtails, pipits, tits, crows, magpies, starlings, weaver-birds, amadavads, sparrows, buntings, finches, and larks are fairly represented both in species and individuals. From the coast to the Sahyádri hills, perchers of all kinds flourish in abundance. The various aspect of the district and its irregular configuration afford ample means for the wants and peculiarities of the different families included in this order.

Tribe — FISSIROSTRES.

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Production.

Birds.

INSESSORES.

Hirundinidæ.

Fam.—HIRUNDINIDÆ.—Swallows, Martins, and Swifts, especially the first and last, are plentiful throughout the district, and particularly so on the sea coast. The natives apply the term *pákoli* to all the Hirundinidæ indiscriminately.

Sub-Fam.—HIRUNDININÆ.—The Common Swallow, *Hirundo rustica*, (*Lin. Jerd.* 82), is not a permanent resident and as far as is known does not breed in the district. It is therefore less often seen than its congeners. It appears in the cold weather in great numbers and leaves about the middle of March.

The Wiretailed Swallow, *Hirundo flifera*, (*Steph. Jerd.* 84), is a permanent resident, though sparingly distributed. They breed in rocks overhanging streams, under bridges and culverts, making a beautiful cup nest lined with feathers, laying two or three delicate white eggs spotted with red, and when fresh shewing a pink tinge.

The Redrumped or Mosque Swallow, *Hirundo erythropygia*, (*Sykes. Jerd.* 85), is the common swallow of the district, found plentifully in all parts, both inland and on the coast. They make retort-shaped mud nests under the eaves of buildings, under ledges of rocks and other similar places. The interiors of ruined fort buildings are an especially favourite place with them. The nests are usually single. These swallows appear to breed only in the hot weather, but nests in a more or less complete state of preparation are found all the year round. The theory is, that 'the long retort-shaped nests well lined with feathers are built as winter residences, and the less developed ones as breeding places.'¹ This is perhaps borne out by the fact, more than once noticed by the writer, that the winter nests of this species are used as roosting places by the Indian Swift, *Cypselus affinis*.

The Dusky Crag Martin, *Ptyonoprogne concolor*, (*Sykes. Jerd.* 90), is found sparingly all down the coast. They breed in the hot weather, making a beautiful cup nest lined with feathers under the ledges of rocks overhanging the sea shore, laying three or four white eggs minutely speckled with brown. These nests are always found single. No other martins are known to occur, though probably, during the cold weather, the Mountain Crag Martin, *Ptyonoprogne rupestris*, visits the higher Sahyádri ranges.

¹ Nests and Eggs of Indian Birds. Allan Hume, 76.

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Birds.
Cypselinæ.

Sub-Fam.—CYPSELINÆ.—The Common Indian Swift, *Cypselus affinis*, (*Gray. Jerd.* 100), is plentifully distributed, being especially common about the rocky coast head-lands. Numbers breed every year, during April and May, in the rocks at the base of the sea wall of the island fort of Suvarndurg. They are gregarious in their habits and a dozen or more nests may be found all joined together in clusters.

The nests, and especially the outermost ones of the group, though they look very untidy and unfinished, are strongly made. The materials used are grass and feathers, stuck together with gluten, the latter shewing more in the lining than outside, and giving the interior a very sticky appearance. The entrance to the nests is usually at the top through a narrow crevice left unattached to the rock. The eggs, usually three to a nest, are a delicate white, very elongated and transparent. These Swifts use no mud in building their nests.

The Palm Swift, *Cypselus batassiensis*, (*E. J. Gray. Jerd.* 102), is an inhabitant of this district, although the palmyra tree, *Borassus flabelliformis*, with which it is usually associated, and on which alone it is said to nest, is almost unknown. One solitary old palmyra, perhaps the only one in the district, stands on the crest of the cliff overhanging the village of Bánkot, the northern boundary of the district. In this tree a pair of Palm Swifts were seen to roost for several nights running in April and May, but of their tiny watch-pocket nest no trace was found. These Swifts have also been seen and taken at various times of the year in cocoanut gardens at Ratnágiri, where no palmyra palms are found.

The Edible Nest Swiftlet or Salangane, *Collocalia unicolor*, (*Jerd.* 103), is, as Jerdon has stated, found on some rocks rising out of the sea, about twelve miles off the port of Vengurla.

The Vengurla swiftlets breed in March and April, in caverns of the rocks, the nests being made of inspissated saliva, in the form of white gelatine, pure white when fresh, but when old, brownish and mixed with extraneous substances. The rock on which the nests are found is about four miles long. The right of collecting the nests is every year farmed on behalf of Government, and for the ten years ending 1877-78, brought an average revenue of £2 17s. (Rs. 28½). The farm is always taken by Goanese and the produce is dried and sent to Goa. The average yearly yield is stated to be about 28 pounds, which makes the Government royalty about 2s. the pound; and this estimate is probably below the mark. The quantity produced is said, of late years, to have greatly fallen off. Jerdon, on what authority is not stated, gives the annual produce as a hundredweight. Under any circumstances the farm must be a profitable one. According to McCulloch,¹ the common price at Canton for birds' nests of the first sort is £5 18s. 1½d. the pound; for the second sort about £4 14s.; and for the third sort about £2 15s. the pound.

The Indian Crested Swift, *Dendrochelidon coronata*, (*Tick. Jerd.* 104), is distributed throughout the district, and appears to be equally common near the coast as near the Sahyádris. It seems to be a permanent resident. According to Mr. Hume, this species of Klecho breeds from April to June on bare dead branches of forest

¹ Commercial Dictionary, 1871.

trees, laying a single elongated white egg. The nest is 'a very shallow half saucer composed of thin flakes of bark, gummed probably by the birds' own saliva against the side of a tiny horizontal branch. The nest is nowhere more than $\frac{1}{8}$ inch in thickness, is at most $\frac{1}{2}$ inch deep in the deepest part, and can be exactly covered by a half crown. The parent bird, though slender, is fully ten inches in length, and consequently the bird, when sitting across the nest and the tiny branch to which it is attached, completely hides the nest, and no one would suspect that there was any nest at all.'¹ The writer has not found any nests of this species.²

Fam.—CAPRIMULGIDÆ.—The Jungle Nightjar, *Caprimulgus indicus*, (*Lath. Jerd.* 107). This species of goatsucker having the tarsus feathered appears to be rare. A single specimen was obtained by the writer in a thick grove near Guhágár. It was, contrary to the usual habits of the family, found perched high in a tree after the sun was well up.

Chapter II.

Production.

Birds.

Cypselinæ.

Caprimulgidæ.

The Common Indian Nightjar, *Caprimulgus asiaticus*, (*Lath. Jerd.* 112), is common wherever there is sufficient forest to give cover by day. It is very plentiful on the hillsides overhanging the north bank of the Kelsi creek in the Dápoli sub-division, which are covered with thick scrub brushwood. Here any evening after sunset, great numbers of these birds may be seen, hunting noiselessly a few feet above the bushes, after the various moths and insects that fill the air. Perching at short intervals on the bare ground, they utter their well known cry, which has been aptly compared to the sound made by a stone scudding over ice. The native name for this and other species of goatsuckers is *kápu*.

Franklin's Nightjar, *Caprimulgus monticolus*, (*Frankl. Jerd.* 114), a larger species, at once distinguishable from its congeners by its unfeathered tarsus, and wholly white outer tail feathers, is perhaps equally common, at any rate in the north of the district. In addition to the above species, it is probable that Sykes' Nightjar, *Caprimulgus maráthensis* (*Sykes, Jerd.* 113), inhabits the Sahyádrí forests. The latter species as well as the Nilghiri Nightjar, *Caprimulgus kelaarti*, (*Blyth, Jerd.* 108), is included in Major Lloyd's list of Konkan birds.

Fam.—MEROPIDÆ.—The Common Indian Bee-eater, *Merops viridis*, (*Lin. Jerd.* 117), is plentifully distributed throughout the district. In the day time it is usually seen alone or in small parties. Taking up a position on a branch or stalk of coarse grass, it makes frequent short sallies after its insect prey, returning with the utmost regularity to the same perch, time after time, for hours together. In the evening the bee-eaters of one locality all gather together, and after disporting themselves for some time in one large flock, retire to roost night after night in the same trees. The local Marátha name for this bird is *pathal kirli*. No other species of bee-eater has been recorded from Ratnágiri. The writer has, however, received specimens from Sávantvádi of the

Merodipæ.

¹ Hume's Nests and Eggs of Indian Birds, 92.

² No other swifts have been observed in Ratnágiri, but the Alpine Swift, *Cypselus melba*, (*L. Jerd.* 98), has been obtained in Sávantvádi.

Chapter II.**Production.****Birds.**

Bluetailed Bee-eater, *Merops philippensis* (*Lin. Jerd.* 118). Major Lloyd mentions the Chesnutheaded Bee-eater, *Merops swinhoii*, (*Hume. Jerd.* 119), as found in the southern district of the Konkan, while Mr. Fairbank says it is found on the hills in the Goa and Sávantvádi forests.

Coraciadæ.

Fam.—CORACIADÆ.—The Indian Roller, *tás* or *dháu*, *Coracias indica* (*Lin. Jerd.* 123), is the only species of roller found. Though nowhere very plentiful, and not often seen near the coast, a few birds are always found about well-wooded inland villages. Mr. Fairbank describes this species as a cold weather visitant leaving the Marátha country in March, and Major Lloyd calls it a winter visitant to the Konkan. The writer is inclined to think that the roller is in many cases a permanent resident. He has had no opportunities of verifying this during the rainy months. But in the Khed sub-division in the latter part of March, he has found several nests with fresh eggs, and it is clear that the young broods from these nests would not have been ready for a long migratory flight before the middle or end of May, if so soon. Captain G. F. L. Marshall, R.E., in his 'Birds Nesting in India' enters the Indian roller's breeding season as from the latter end of March to the first half of June, while another observer, Mr. F. R. Blewitt, has found eggs in July.¹ The nests mentioned above would therefore appear to have been exceptionally early, and birds breeding later would have to defer their migration till after the burst of the rains. In the western districts of Sátára, the writer has also observed no very appreciable diminution in the number of rollers up to the end of April. The roller breeds in holes of decayed cocoanut, mango, silk-cotton and other trees, laying, as a rule, four very glossy broad oval eggs. The nests have usually no lining of grass or feathers, but are simply covered over with powdered bark.

Halcyonidæ.

Fam.—HALCYONIDÆ.—The Brownheaded Kingfisher, *Pelargopsis gurial*, (*Pearson. Jerd.* 127), commonly called the Storkbilled Kingfisher, has been obtained at Rajápur, and has also been noticed at Ratnágiri, but is rare.

The Whitebreasted Kingfisher, *Halcyon smyrneusis*, (*Lin. Jerd.* 129), is widely distributed; but individuals are comparatively scarce. It is more often found near small woodland streams than in large tidal creeks, and unlike other kingfishers, is often seen perched in dry brushwood at a considerable distance from water.

The Whitecollared Kingfisher, *Halcyon chloris*, (*Bodd. Jerd.* 132). The occurrence of this bird on the west coast of India was unexpected. Hitherto, according to Mr. Hume, it has been known to occur only in the Sunderbands, and thence down the Burman and Malayan coast, and at the Andaman islands. The writer found a small colony of these birds at Kelsi in the Dápoli sub-division, settled near the village, in a mangrove swamp on the banks of a small tidal creek. They have also been found in a similar situation in Ratnágiri, and further search may lead to their discovery in other parts of the district. The whitecollared kingfisher never pounces, but catches small crabs and molluscs out of the mud, preferring this to deepwater-fishing.

¹ Nests and Eggs of Indian Birds. A. O. Hume, 104.

It has a peculiar shrill call, which it utters both when perched and on the wing. Its nest has not yet been discovered.

The Common Indian Kingfisher, *Alcedo bengalensis*, (*Gmel. Jerd.* 134), is one of the commonest birds in the district. It swarms on all the tidal creeks, in lagoons and mangrove swamps, and every little pond or large well is tenanted by a pair or more of these industrious little fishermen. It is abundant also on the sea coast, wherever a rocky beach or cavernous cliff affords a perch, from whence to pounce on its finny prey. They breed in holes of river banks in the hot weather, but the nests are placed so far in, and the mouths of the holes are so small that they are difficult to obtain.

The Pied Kingfisher, *Ceryle rudis* (*Lin. Jerd.* 136), is also common, but not nearly so plentiful as the last. It seems to be more a freshwater species than most other kingfishers, and is less often seen in tidal waters than in fresh inland rivers. It is particularly abundant on the Krishna and other Deccan rivers, where it becomes exceedingly familiar, diving with the utmost unconcern amongst the crowds of bathers and clothes-washers who frequent the steps on the banks. The Konkani Marátha name for all kingfishers is *dísá*. Major Lloyd also enters the Threetoed Kingfisher, *Ceyx tridactylus*, (*Pall. Jerd.* 133), as a Konkani species only met with near secluded forest streams. If it occurs in Ratnágiri, as is probable, it must be a rare bird.

Fam.—BUCEROTIDÆ.—The Great Hornbill, *Dichoros cavatus*, (*Shaw Jerd.* 140). The eccentricities of this bird; the imprisoning of the brooding female in a hole of a tree, with mud plastered round so as to leave only a small opening; its paintbrush with an inexhaustible supply of yellow oil paint, with which it performs its toilet by decorating various parts of its plumage; its loud braying call and extraordinary appearance are well known. According to Jerdon, Goa is the northern limit of its distribution. It is, however, found throughout the Ratnágiri district, and at least in the south of Kolába. As a rule, this species keeps to the slopes of the Sahyádris and the well wooded low lands at their base. It is more rarely found in the neighbourhood of the sea. During the cold weather, individuals are often seen at Dápoli, and at this period they appear to wander far and wide in search of the ripe berries and fruits, which form their staple food. Like the African species they will kill snakes when they see them. They are usually found in small parties of four to six birds occasionally in pairs, but rarely single. One or more pairs are said to breed regularly near Poládpur, in the Mahád sub-division of the Kolába district. This and the next species are by Konkani Maráthás called *garul pakshi*.

The Malabár Pied Hornbill, *Hydrocissa coronata*, (*Bodd. Jerd.* 141), has been obtained by Dr. Armstrong in the southern sub-divisions and it also visits Ratnágiri and Sangameshvar. Its habits are similar to the last. It appears not to extend so far north as the great hornbill. In addition to the above hornbills, the Jungle Grey Hornbill, *Tockus griseus*, (*Lath. Jerd.* 145), has been obtained in the Sávantvádi forests, which probably form its northern limit. It has not been recorded from Ratnágiri.

Chapter II. Production.

Birds.
Halcyonidæ.

Bucerotidæ.

Chapter II.

Production.

Birds.

Psittacidae.

Tribe—SCANSORES.

Fam. — *PSITTACIDÆ*. — The Roseringed Paroquet, *Palæornis torquatus*, (*Bodl. Jerd.* 148),^t the common Deccan species, is comparatively scarce, but widely distributed. Like all other paroquets, it nests in holes of trees during the hot months of March and April, laying four or more white glossless eggs. In the east of Sâtâra, the natives fancy that individuals of this species breeding in banyans and *pipals* prove better talkers than those who nest in mango, tamarind, and other trees. In taking young birds from the nest they are always guided by this whimsical idea, which does not appear to extend to the Konkan. Paroquets are called by the natives *kir* and *popat*. In this district caged parrots only are called *râghu*.

The Roseheaded Paroquet, *Palæornis purpureus*, (*Mull. Jerd.* 149), is the common species of the district. It is abundant every where from the coast to the Sahyâdris, and is very destructive to standing crops. Its nest-building and breeding season are the same as that of the last species.

The Bluewinged Paroquet, *Palæornis columboides*, (*Vig. Jerd.* 151), a lovely species with dove grey head and blue wings, is found only in the Sahyâdri forests.

The Indian Loriquet or Lovebird, *Loriculus vernalis*, (*Sparrm Jerd.* 153), is plentiful in certain localities, as Dâpôli and Ratnâgiri; but seems not to be widely distributed. During the rainy season they appear at Ratnâgiri in large flocks, frequenting the banyan trees in fruit, and keeping up a continual low whistling chirrup. This species is called *karta* by the natives.

Picidæ.

Fam. — *PICIDÆ*. — The Yellowfronted Woodpecker, *Picus marathensis* (*Lath. Jerd.* 160), is not very common, but is occasionally seen in thin forest throughout the district.

The Southern Pigmy Woodpecker, *Yungipicus nanus*, (*Vig. Jerd.* 164), has been obtained by Dr. Armstrong at Bhâvda at an elevation of 2000 feet. It has not been recorded from any other locality and appears to be rare.

The Goldenbacked Woodpecker, *Chrysocolaptes sultaneus*, (*Hodgs. Jerd.* 166), a beautiful bird, is found here and there in the inland tracts at the base and on the slopes of the Sahyâdris. It is not nearly so common as the Smaller Goldenbacked Woodpecker, *Brachypternus puncticollis*, (*Malh. Jerd.* 181).

The Blackbacked Woodpecker, *Chrysocolaptes festivus*, (*Bodl. Jerd.* 167), the handsomest perhaps of all the group, is not uncommon about Ratnâgiri, being found in the cocoanut gardens near the coast, as well as inland. The female, with her bright orange cap-like silk fresh-reeled from the cocoon, is particularly pleasing, and if less gaudy, is equally as pretty as her crimson-capped partner.

The Madras Rufous Woodpecker, *Micropternus gularis*, (*Jerd.* 179) has been obtained both in the north and south of the district. It affects thick groves and forests, and does not appear to frequent

the coast.¹ All the specimens found by the writer had the head and tail smeared with resin, a fact first brought to notice by Mr. Elliot.

Malherbe's Goldenbacked Woodpecker, *Brachypternus puncticollis*, (*Malh. Jerd.* 181), is the common goldenbacked woodpecker of the district, and is universally distributed, frequenting alike the cocoanut gardens on the coast and the inland forest tracts. It breeds in the hot months of April and May. Major Lloyd also includes *Brachypternus aurantius* (*Lin. Jerd.* 180). This species and *Brachypternus puncticollis* are very nearly allied, and may easily be confounded. Both may meet in the district, but the specimen sent from the northern sub-divisions to Mr. Hume were all pronounced to be typical *Brachypternus puncticollis*. All the specimens collected from the south by Dr. Armstrong are also *puncticollis*, and not *aurantius*.

Fam. — MEGALÆMIDÆ. — The Malabár Green Barbet, *Megalæma inornata*, (*Wald. Jerd.* 193 *bis*), which differs from the Common Green Barbet, *Megalæma caniceps* (*Frankl. Jerd.* 193), by the almost complete absence of the white specks on the tertiaries and wing coverts, characteristic of the latter, is during the rainy season plentiful at Ratnágiri, and ranges from there to the Sahyádri slopes, where its loud familiar call is heard incessantly throughout the day. In the northern sub-divisions it is restricted to the Sahyádri forests, and does not, except perhaps during the rains, visit the neighbourhood of the coast. Both this and the next species are called *koturja* by the natives.

The Small Green Barbet, *Megalæma viridis*, (*Bodd. Jerd.* 194), appears to be confined to the Sahyádri forests, where it is equally plentiful with its larger congener, ranging throughout the whole length of the district.

The Crimsonbreasted Barbet, *Xantholæma hæmacephala*, (*Mill. Jerd.* 197), the little Coppersmith or *tuktuk*, is one of the commonest birds in the district, and is universally distributed. It nests in February and March, excavating holes in decayed trees, and laying three or four exceedingly long and cylindrical white eggs. Major Lloyd includes the Crimsonthroated Barbet, *Xantholæma malabarica* (*Blyth. Jerd.* 198), as a Konkan species; but it has not been obtained in Ratnágiri, although it is found in the neighbouring forests of Sávantvádi.

Fam. — CUCULIDÆ. — The Indian Cuckoo, *Cuculus micropternus*, (*Gould. Jerd.* 203), has been obtained at Ratnágiri. It appears to be exceedingly rare. It has a peculiar call which Jerdon describes as a "double note of two syllables each, a fine melodious pleasing whistle," and which Tickell likens to a "double repetition of the word cuckoo."

The Common Hawk Cuckoo, *Hierococcyx varius*, (*Vahl. Jerd.* 205), has been procured by Dr. Armstrong from the south of the district, but also appears to be rare.

Chapter II. Production.

Birds.
Picidæ.

Megalæmidæ.

Cuculidæ.

¹ Mr. Hume remarks of some specimens procured in the north of the district that they were not typical *Micropternus gularis*, but intermediate between this form and *M. Phæoceps* (*Bly. Jerd.* 178).

Chapter II.**Production.****Birds.*****Cuculidæ.***

The Indian Koel, *Eudynamis honorata*, (*Lin. Jerd.* 214), is found everywhere, both on the coast and inland. It begins calling at the end of May, and continues vocal up to the beginning of July, during which time it probably lays its eggs in the nests of late breeding crows, *Corvus impudicus*. According to the natives, the breaking out of this usually quiet unobtrusive bird into song or whistle denotes a prayer for the coming rain. The Koel seldom, if ever, alights on the ground, and the poor bird, they say, is thus, for a great part of the year, deprived of its drinking water, depending on the scanty supply of dew collected on the leaves of the trees. Getting very thirsty towards the end of the hot weather, the Koel grows querulous and importunate for the coming rain, which shall refill the hollows of the trees with pure refreshing water. Several other cuckoos probably occur in the district; but they are shy birds and difficult to procure. The Piedcrested Cuckoo, *Coccytes jacobinus* (*Bodl. Jerd.* 212), and the Small Cuckoo, *Cuculus poliocephalus* (*Luth. Jerd.* 201), have been found at Devrukh in the Sangameshvar sub-division. The Indian Plaintive Cuckoo, *Cacomantis passerinus* (*Vahl. Jerd.* 208), should also occur, but no specimens have been obtained.

Centropodince.

Sub-Fam.—CENTROPODINÆ.—The Common Coucal or Crow-pheasant, *Centrocoryx rufipennis*, (*Ill. Jerd.* 217), is found everywhere on the outskirts of villages, gliding with marvellous ease through tangled undergrowth and thick bushes. Its deep mournful note, sometimes single, sometimes in a discordant chorus, is to be heard at all times of the day. The Konkani name for this bird is *kukulkumba*.

The Southern Sirkeer, *Taccocua leschenaulti* (*Less. Jerd.* 219), a peculiar species, with bristly head and bright cherry bill, has been found in the woods on the slopes of the hill fort of Mandangad, whence the writer obtained two specimens. A single specimen has also been obtained by Dr. Armstrong from the neighbourhood of the A'mba pass. It is a rare bird, in its habits much like the crow pheasant.

Tribe—TENUIROSTRES.***Nectarinidæ.***

Fam.—NECTARINIDÆ.—The Violet-eared Red Honeysucker, *Æthopyga vigorsii*, (*Sykes. Jerd.* 226), a beautiful species, is plentiful on the western slopes of the Sahyâdri range. It is also found more sparingly near the coast in cocoanut gardens.

The Amethyst Honeysucker, *Cinnyris Zeylonica* (*Liu. Jerd.* 232), is more widely distributed than the last, and more plentiful. The males keep their exquisite plumage throughout the year. Their nests are beautiful, hung from the slenderest twigs, and rocked to and fro by every breath of wind. The nest is pear-shaped narrowing in the middle, with a side entrance shaded by a tiny overhanging porch. The materials are the finest grass lined with soft down, and the nests are on the outside prettily decorated with chips of wood, spider-webs, dried flowers, cocoons, and anything else that pleases the fancy of the diminutive architects. They lay two, and occasionally three, tiny greenish white eggs speckled with minute brown spots. The jujube tree, *Zizyphus jujuba*, is a favourite place for their nests; but they are very fearless, often building in verandahs and house porches. The breeding season varies

considerably ; but nests have been found by the writer in January in this district, and in September and October in the Sâtára district.

Chapter II.**Production.**

Birds.

Nectarinidæ.

The Tiny Honeysucker, *Cinnyris minima* (*Sykes. Jerd.* 233), is less common than the last, being more exclusively restricted to the Sahyádrí range, though a few are found here and there in the neighbourhood of the coast. They are common on the western slopes of Mahábaleshvar, and native birdcatchers, who find a too ready sale for them amongst the European residents, every year destroy large numbers.

The Purple Honeysucker, *Cinnyris asiatica* (*Lin. Jerd.* 234), is abundant everywhere from the coast to the Sahyádrí hills, wherever flowering shrubs are found. The brilliant metallic hue of the male is donned only at the pairing season, and in his winter garb of grey-green little trace of his splendid wedding dress remains, save from the chin a central stripe of glossy violet. Both the nests and eggs of this species very closely resemble those of the amethyst honeysucker.

The Larger Purple Honeysucker, *Cinnyris lotenia*, (*Lin. Jerd.* 235), is also found in the district, but is much more scarce than the preceding, from which it differs chiefly in its longer and more rounded bill. It has been obtained in the Dápoli and Ratnágiri sub-divisions near the coast, and is probably distributed sparingly throughout the district.

Tickell's Flowerpecker, *Dicœum erythrorhynchus* (*Tick. Jerd.* 238), has been obtained at Ratnágiri, and is probably to be found in other localities. Its small size and its habit of keeping to the tops of the highest trees make it difficult to find. The nearly allied, but larger species, the Nilgiri Flowerpecker, *Dicœum concolor* (*Jerd.* 239), substituted in Major Lloyd's list for *Dicœum erythrorhynchus*, has been obtained in Sávantvádi. But all the specimens observed by the writer at Ratnágiri clearly belong to the latter species, which also, according to Mr. Fairbank, is found on the western slopes of Mahábaleshvar.

The Thickbilled Flowerpecker, *Piprisoma agile* (*Tick. Jerd.* 240), readily distinguished by its peculiar bill from all other sun birds, is found sparingly at Ratnágiri and also at Sávantvádi.

Fam. — **UPUPIDÆ.** — The European Hoopoe, *Upupa epops* (*Lin. Jerd.* 254), is seen only in the cold weather, and is more common than the next species.

Upupidæ,

The Indian Hoopoe, *sutir*, *Upupa ceylonensis*, (*Reich. Jerd.* 255), is found here and there throughout the district, and is to be seen near all well wooded villages. In the cold weather these birds associate in small parties of four or five. They feed exclusively on insects, which they pick up on the ground. No representatives of either the Treecreepers, *Certhiada*, or the Nuthatches, *Sittina*, have been observed in the district.¹

Tribe — DENTIROSTRES.

Fam. — **LANIADÆ.** — The Rufousbacked Shrike, *Lanius erythronotus*, (*Vig. Jerd.* 257), is the common shrike of the district found

Laniadæ.

¹ The Velvetfronted Nuthatch, *Dendrophila frontatis*, (*Horsf. Jerd.* 253), has been procured at Sávantvádi.

Chapter II.

Production.

Birds.

Laniadae.

everywhere in woods and hedgerows. This butcher bird, as it is popularly named, frequently impales its prey, crickets, locusts, and other insects, on thorns in bushes. It is a permanent resident.

The Baybacked or Hardwick's Shrike, *Lanius vittatus* (*Valenc. Jerd.* 260), is comparatively rare, and is not often seen near the coast, preferring the forests on the slopes of the Sahyádris. Both this and the last species are extremely vicious when caught alive or wounded.

The Common Wood Shrike, *Tephrodornis pondicerianus*, (*Gmel. Jerd.* 265), is both inland and on the coast very abundant in certain localities, in groves and gardens, where it is usually found in small flocks. It appears to be somewhat partially distributed. Wherever found it is a permanent resident.

The Little Pied Shrike, *Hemipus picatus*, (*Sykes. Jerd.* 267), has been obtained at Rájápur and is found in Sávantvádi, but does not appear to extend to the north of the Ratnágiri district.

Campephaginae.

Sub-Fam. — CAMPEPHAGINÆ. — The Blackheaded Cuckoo Shrike, *Volvocivora sykesi*, (*Strick. Jerd.* 268), has in well wooded country been obtained by the writer in the Dápoli sub-division at Kelsi and Mandangad, and also at Khed and Guhagar. It has been found also at Ratnágiri, Rájápur, and Sávantvádi, but is decidedly uncommon.

The Large Cuckoo Shrike, *Graucalus macei*, (*Less. Jerd.* 270), is common everywhere in well wooded tracts, village groves, and avenues. It is usually seen in pairs, and feeds entirely on the insects and fruit which it can find on trees, for it seldom, if ever, alights on the ground. It begins to breed as early as February, and is also said to breed during the rains at Dápoli. They build in forks of trees, making a shallow cup nest of fine twigs, very loosely put together. The eggs, two or three in number, are of a greenish fawn colour, with pale brownish red spots. This bird has a very sweet call. In addition to the above, the Grey Shrike, *Lanius lahtora* (*Sykes. Jerd.* 256), and the Malabár Wood Shrike, *Tephrodornis sylvicola* (*Jerd.* 264), appear as Konkan birds in Major Lloyd's list. The grey shrike is found in the Deccan and may extend to this district, but has not hitherto been recorded. The Malabár wood shrike does not probably come so far north as this district. The Dark-grey Cuckoo Shrike, *Volvocivora melaschista* (*Hodys. Jerd.* 269), has been found in Sávantvádi, but not in Ratnágiri.

The Orange Minivet, *Pericrocotus flammeus*, (*Forst. Jerd.* 272), or the Fiery-red Bird, as it is sometimes called by Europeans at Mahábaleshvar, is found sparingly on the western slopes of the Sahyádris range, throughout the length of the district, but does not make its way to the coast. The splendid red breast of the male, set off by his glossy blue head and upper plumage, makes him one of the handsomest birds in the country. Like the next species, the orange minivets associate in small flocks, moving briskly about from tree-top to tree-top, and keeping up an incessant chirping.

The Small Minivet, *Pericrocotus perigrinus*, (*Lin. Jerd.* 276), a beautiful little bird, is, wherever there are trees, common and abundant from the coast to the Sahyádris. Its habits are similar

Chapter II.

Production.

Birds.

Dicrurinae.

to the last species, but it is much more familiar and frequents low brushwood and hedgerows as well as lofty trees. This species breeds in June and July, making a very neat cup nest of fine twigs, which it places high up in the forks of trees, and laying two or three greenish white eggs freckled with brick-dust red.

Sub-Fam.—*DICRURINÆ*.—The Common Drongo Shrike, *Buchanga atra* (*Herm. Jerd.* 278), the 'King of the Crows' is one of the commonest birds of the district, and is universally distributed. It is equally plentiful on the bare rocky plateaus near the coast, where, failing trees, it perches on cattle and goats, and in the well wooded inland tracts. It nests in April and May on forks of trees, laying four pinkish white eggs freckled with red spots. Its local vernacular name, *govindā*, applies equally to the next species.

The Longtailed Drongo, *Buchanga longicaudata*, (*Huy. Jerd.* 280), closely resembles the last, wanting the white spot at the gape, and is also abundant, though more confined to forest tracts than the king of the crows. Both are permanent residents and have similar habits.

The Whitebellied Drongo, *Dicrurus cœrulescens*, (*Müll. Jerd.* 281), has been obtained by Dr. Armstrong from the south of the district, but is uncommon.

The Bronzed Drongo, *Chaptia ænea*, (*Vieill. Jerd.* 282), has also been obtained by Dr. Armstrong at Bánda at the foot of the Sahyádrī range, in the Rájápur sub-division, but has not yet been found elsewhere.

The Malabár Rocket-tailed Drongo, *Dissemurus paradisens* (*Scop. Jerd.* 285), is found at the extreme south of the district at Vengurla and the neighbouring villages. A nest found near Vengurla during the first week in April, is described as being made of a wiry grass rather loosely put together, and placed near the end of a branch of a large mango tree. The nest contained two eggs of a white ground colour, which unfortunately were destroyed.

Sub-Fam.—*ARTAMINÆ*.—The Ashy Swallow Shrike, *Artamus fuscus* (*Vieill. Jerd.* 287), has been found in Vengurla cocoanut gardens.

Fam.—*MUSCICAPIDÆ*.—The Paradise or Royal Flycatcher, *Muscipeta paradisi*, (*Lia. Jerd.* 288), is found sparingly in all the well wooded tracts of the district. The adult males with their glossy black heads and flying white streamers are conspicuous objects when seen flitting like streaks of silver from tree to tree. The paradise flycatcher is a restless bird, seldom remaining long in one tree, and always on the move. It catches insects on the wing, and may often be seen in pursuit of its prey near some small tree-girt pool. The young males and females of all ages have the parts which are white in the adult male bright chestnut, and males in a state of transition from the chestnut to the white plumage are not unfrequently seen. This species is at Mahábaleshvar, where it is common, known to Europeans as the 'dhobi bird,' and is called by the natives the *bán pákhru*.

Muscicapidæ.

The Blacknaped Blue Flycatcher, *Hypothymis azurea*, (*Bodl. Jerd.* 290), is found occasionally, but is not abundant anywhere, and is usually seen only in well wooded tracts. The males with their bright and delicate blue plumage, contrasting so effectively with their silky black caps are very beautiful birds.

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Birds.

Muscicapidæ.

The Whitespotted Fantail, *Leucocerca leucogaster*, (*Cuv.* 293), an amusing and familiar little bird, is very common. A pair or so are to be seen in almost every bush or tree in the district. Their quaint manners and grotesque antics are well known. Their dance, a short flight of a few feet to and from a branch of a tree, followed by a half pirouette, a lowering of head and wings, and a spreading of the broad tail, is kept up incessantly throughout the day. These fantails are usually seen in pairs. They are said to breed at Dápoli during the rainy season. The Whitebrowed Fantail, *Leucocerca aureola* (*Vieill. Jerl.* 292), is also a probable inhabitant of the district. But all the specimens hitherto obtained by the writer are *L. leucogaster*.

The Southern Brown Flycatcher, *Alseonax latirostris*, (*Raffl. Jerl.* 297), is rare. The writer obtained one specimen at Khed, and in the south of the district a few have been secured by Dr. Armstrong.

The Verditer Flycatcher, *Stoporala melanops*, (*Vig. Jerl.* 301), rare near the coast, is more plentiful in the well wooded country at the base of the Sahyádrí hills.

The Blue Redbreast, *Cyornis tickelli*, (*Blyth. Jerl.* 305 and 306), is distributed sparingly in thick groves. It is usually seen alone, and is a very familiar bird, often entering temples and open sheds in pursuit of insects. Major Lloyd includes the Bluethroated Redbreast, *Cyornis rubeculoides* (*Vig. Jerl.* 304), as a Konkan species; this has not been found in Ratnágiri.

The Whitetailed Robin or Dwarf Flycatcher, *Erythrostera parva* (*Bech. Jerl.* 323 *lis*), a familiar little bird, is often seen in clumps of trees in the cold weather, and has a confiding way of perching upon tent ropes. It is usually alone. It disappears in March or April before the male has fully assumed its orange-red breast.

Merulidæ.

Fam. — *MERULIDÆ.* *Sub-Fam.* — *MYIOTHERINÆ.* — The Malabár Whistling Thrush, *Myiophonus Horsfieldi*, (*Vig. Jerl.* 342), is in suitable places found all along the Sahyádrí range, both on the slopes and at the base of the hills, but does not extend to the coast. Its rich mellow whistle, and its love of mountain waterfalls and burns are well known.

The Indian or Yellowbreasted Ground Thrush, *Pitta brachyura* (*L. Jerl.* 345), a beautifully plumaged bird, is found sparingly at the base and on the lower slopes of the Sahyádrí range. It also, but more rarely, frequents thick gardens near the coast.

Sub-Fam. — *MERULINÆ.* — The Blue Rock Thrush, *Cyanocinclus cyannus*, (*Lin. Jerl.* 351), is a cold weather visitant, and frequents bare rocky grounds and stony hills. It is common both on the coast and inland. It is almost always alone and feeds on the ground. It is a familiar bird and has a sweet note. It may often be seen like the "sparrow on the housetop," with which it is by some supposed to be identical, perched on the ruins of an old fort, or walls. It does not leave the district till the end of March or the beginning of April.

The Blueheaded Chat Thrush, *Petrophila cinclorhynchus*, (*Vig. Jerl.* 353), a pretty bird, chiefly confined to the ravines and slopes of the Sahyádrí range. It is common at Mahábaleshvar and has been

obtained at Bávda in the Rájápur sub-division. According to Mr. Fairbank, this thrush is only a cold weather visitant. It has not been found near the coast.

The Whitewinged Bush Thrush, or Ground Thrush, *Geocichla cyanotis*, (*Jerd. and Selb. Jerd.* 354), is common and a permanent resident. It is found in gardens, groves, and woods from the coast to the slopes of the Sahyádris. It is especially common at Dápoli, where its mellow song may be heard in every garden from the middle of May till July or August. They breed generally in mango trees, early in the rains, making a cup nest of grass, twigs, and roots, plastered with mud, and placing it low down in the fork of the tree. The eggs, three or four in number, vary greatly in colour and markings, the ground colour being either pale-green or fawn, closely freckled with several shades of brownish red. These little thrushes are very vigorous and bold in defence of their young, and will fly at any intruder with great intrepidity. Their habits are very similar to those of the English song thrush.

The Blackcapped Blackbird, *Merula nigropileæ*, (*Laf. Jerd.* 359), is also widely distributed through the district, high and low, from the gardens on the sea board to the Sahyádris forests. It appears to be a permanent resident, as specimens have been obtained at all times of the year. It feeds on the ground as well as on the fruit of trees, but is more arboreal in its habits than the last species, and may often be seen in company with mynas, parrots, green pigeons, barbets, bulbuls, ioras, and other birds, enjoying the ripe red berries of a wide-spreading banyan tree. Major Lloyd includes amongst his list of Konkan merulidæ, the Pied Blackbird, *Turdulus wardi*, (*Jerd.* 357), and the Orangeheaded Ground Thrush, *Geocichla citrina* (*Lath. Jerd.* 355), neither of which has been recorded from Ratnágiri. The orangeheaded thrush is, probably, entirely replaced in this district by the whitewinged species.

Sub-Fam.—**TIMALINÆ.**—The Yelloweyed Babbler, *Pycnorhis sinensis*, (*Gmel. Jerd.* 385), is found in small parties flying from bush to bush in low hillside brushwood. It is abundant in the Dápolisub-division near the coast, and has also been found in the south of the district. It is a noisy bird, and has all the habits of the larger babblers, *Malaccocercus*. It is said to breed at Dápoli in the rainy season in bamboo clumps in gardens, making a substantial nest of coarse grass, in construction and mode of attachment to upright twigs much like that of the English reed warbler. The eggs of this little babbler are very pretty, pinkish white, freckled, and spotted with red.

The Nilgiri Quaker Thrush, *Alcippe poiocephala*, (*Jerd.* 389), has been obtained at Rájápur, and is common at Sávantvádi. It has not yet been found in north Ratnágiri.

The Whitethroated Wren Babbler, *Dumetia albogularis*, (*Blyth. Jerd.* 398), is comparatively very scarce in this district. It has been obtained from the south by Dr. Armstrong and by the writer at Gulhagar, and is common at Mahábaleshvar.

The Spotted Wren Babbler, *Pellorneum ruficeps* (*Swinson. Jerd.* 399), is also scarce. It is seen occasionally in small parties in thin bush, both inland and near the coast. It is an amusing

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Birds.

Merulinæ.

Timalinæ.

Chapter II.**Production.**

Birds.

Timalinæ.

bird to watch, both when in bushes and when feeding on the ground; putting on very grotesque airs and graces, and continually chattering, and now and then breaking out into a mocking laugh.

The Southern Scimitar Babbler, *Pomatorhinus horsfieldi*, (*Sykes. Jerd.* 404), is found only on the slopes and at the foot of the Sahyâdri range, where it is a permanent resident.

The Rufous-tailed Babbler, *Malacocercus somervillei*, (*Sykes. Jerd.* 435), is the common babbler in the district, entirely replacing the Whiteheaded Babbler, *Malacocercus griseus* (*Jerd.* 433) of the adjoining Deccan districts, and the Jungle Babbler, *M. malabaricus* (*Jerd.* 434), of the Nilgiris and Southern India. This species is spread abundantly throughout the district. Possibly at the extreme south other forms may occur intermediate between this species and either *M. griseus* or *M. malabaricus*. But all the specimens hitherto collected, both from the north and the south of the district, appear to be true and typical *somervillei*. These babblers, or old women as they are called, are equally common near the coast and inland, in gardens, brushwood, hedgerows, and village groves. They usually feed on the ground, hopping actively about, quarrelling and incessantly uttering their scolding nagging note. Their call is not, however, so loud as, and lacks the peculiar jeering intonation of its congener, the Large Grey Babbler, *M. malcolmi* (*Jerd.* 436), which when long sustained has a decidedly irritating effect on the hearer. They nest in June and July in bushes and low branches of trees, laying three or four glossy greenish blue eggs. They are called *kikâti* by the natives and occasionally *chûmbhârin*. Major Lloyd includes in his list of Timalinæ, the Jungle Babbler, *Malacocercus malabaricus*, (*Jerd.* 434), and the Rufous Babbler, *Layardia subrufa* (*Jerd.* 437).

Brachypodulæ.

Fam.—BRACHYPODIDÆ. *Sub-Fam.*—PRYCNOTINÆ.—The Ghât Black Bulbul, *Hypsipetes ganesa*, (*Sykes. Jerd.* 446), has been obtained at Devrukh in Sangameshvar at the foot of the Sahyâdri range. It seems rare and restricted to the Sahyâdri forests.

The Yellowbrowed Bulbul, *Criniger ieticus*, (*Strickl. Jerd.* 450), appears to be plentiful at Bâvda at the foot of the Sahyâdri in the Râjâpur sub-division, and probably occurs throughout the range.

The Whitebrowed Bush Bulbul, *Ixos leucolus*, (*Less. Jerd.* 452), has been obtained at Vijaydurg near the coast. It seems rare and has not been found in the north of the district.

The Southern Redwhiskered Bulbul, *Otocompsa fuscicaudata*, (*Gould. Jerd.* 460 *bis*), is found abundantly throughout the district, both on the coast and inland in well wooded country and patches of bush. In such situations it is quite as common, if not more common than the Madras Bulbul, *Molpastes haemorrhous* (*Gould. Jerd.* 462). They are always found in small flocks. Their breeding season is during the hot months of April and May. The nest is a neat cup placed in bushes or forks of trees, and the eggs are reddish white spotted with bright red and purple. The native name for this species is *bulundi*.

The Common Madras Bulbul, *Molpastes hæmorrhous*, (*Gmel. Jerd.* 462), is also abundant and frequents gardens, thin brush-wood, and fruit trees. It is a more familiar bird than the last, and is more often seen in gardens and orchards. In a vegetable garden it is very destructive. Its note is not so sweet as that of the last species, but it makes a more intelligent and amusing cage bird. As at Sâtára, the Madras bulbul breeds in this district in September and October, and again in April. According to Mr. Hume, it breeds in the plains in June and July, and in the Nilgiris from February to April. The nests are rather neat cups of coarse grass, and the eggs, usually three in number, are dull reddish white blotched with rich lake or madder colour. The nests are placed in forks of trees and shrubs usually low down. These bulbuls show the greatest possible affection for their young, deserting them only at the last extremity. If a nest be found near a house, and the young birds be transferred nest and all to a cage hung in the verandah or a window, the parents will, until the young are fully fledged, continue to feed them fearlessly, entering the cage by its open door. After a day or two, if the cage be moved into a room, the old birds after much twittering and scolding will follow their brood inside, and will in a very short time fly in and out, as if the room belonged to them, bringing a fresh supply of food every five or ten minutes of the day. If one of the parent birds be caught and caged with the nestlings, the other will for a time be greatly excited, but in the end will undertake the keep of the whole family, feeding his or her mate through the bars of the cage, the captive parent passing on provisions to the young ones in the nest, as if nothing had happened.

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Birds.
Brachypodæ.

Sub-Fam.—*PHYLLORNITHINÆ.*—The Common Green Bulbul, *Phyllornis jerdoni*, (*Blyth. Jerd.* 463), is abundant in the well wooded tracts both on the coast and inland. The males differ from the females in having the chin and throat deep velvet black, the same parts being bluish green in the females. They are entirely arboreal, feeding on fruit and insects, and are usually found in pairs or small parties. The Malabár Green Bulbul, *Phyllornis malabaricus*, (*Lath. Jerd.* 464), which is distinguishable from its congener by the forehead of the male being golden instead of green, is also said to inhabit the Sahyádrí range, but no specimens have been hitherto obtained in Ratnágiri.

Phyllornithinæ.

The Common Iora, *Iora tiphia*, (*Lie. Jerd.* 467 and 468). Under this name are included the two varieties known as the Black-headed Iora, (*Jerd.* 467), and the Whitewinged Iora (*Jerd.* 468). The latest researches have shewn that there are no such constant variations between these two forms as to justify their separation as distinct species.¹ The typical male of *Iora zeylonica*, (*Jerd.* 467) has in full breeding plumage the head, back and tail deep shining black, and the wings black with two white bars. The throat, breast and lower parts are bright canary yellow, and he is further adorned with tufts of white on the flanks. His mate is green above including the tail, and pale beneath. On the other hand, the male of *Iora tiphia*, (*Jerd.* 468), is green above with a black

¹ *Stray Feathers* (1874), II. 459.

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tail, and with yellow edgings to his black wings, and is yellow beneath, while his mate differs chiefly in having a green tail. Every intermediate form between these two types appears to have been met with. The iora in both forms is common in the district, frequenting gardens, groves, and forests, sometimes alone, sometimes in pairs, and always on the move. In flying from tree to tree the blackheaded males are exceedingly pretty, fluttering and coquetting with their tails spread, and their silky white tufts fully exposed. They breed in this district during the hot weather. The nest, placed usually on a horizontal branch, is a very beautifully made delicate cup of the finest grass and spider web, very neatly put together without a single loose end. The eggs are usually white with a greyish tinge, with reddish streaks at the larger end. Like all the bulbuls, the ioras are permanent residents.¹

Oriolus.

Sub-Fam.—**ORIOLINE.**—The Indian Oriole, Mango Bird or *Oriolus kundoo*, (*Sylves. Jerd.* 470), is comparatively rare in this district, though it is widely distributed. It is replaced to a great extent, especially towards the coast, by the blackheaded species *Oriolus melanocephalus* (*Jerd.* 472). On the other hand, *Oriolus kundoo* is the common species in the adjoining district of Sâtára to the east of the Sahyâdris, and the blackheaded oriole is there seldom seen. The local native name for all the orioles is *huldi*, a very infelicitous term, implying that the bright golden yellow of the bird's plumage is the same hue as turmeric.

The Blacknaped Oriole, *Oriolus indicus*, (*Briss. Jerd.* 471), has been obtained at Devrukh at the foot of the Sahyâdri range. It has not been found in any other part of the district.

The Blackheaded Oriole, *Oriolus melanocephalus*, (*Lin. Jerd.* 472), is the common oriole of the district, and is found abundantly in all places, where there are trees. It feeds almost entirely on fruit. Its clear mellow note is well known, and its bright plumage makes it a universal favourite. Both orioles nest during the rainy months, and are permanent residents. In the general list of Konkani birds Major Lloyd includes the Southern Blackheaded Oriole, *Oriolus ceylonensis*, (*Bon. Jerd.* 473), and omits *Oriolus melanocephalus*. It appears to be doubtful (*see* Stray Feathers, I. 139) whether *Oriolus ceylonensis* is specifically distinct. But in any case the Ratnâgiri specimens have been pronounced by Mr. Hume to be *Oriolus melanocephalus*.

Sylviadæ.

Fam.—**SYLVIADÆ.** *Sub-Fam.*—**SAXICOLINÆ.**—The Magpie Robin, *Copsychus saularis*, (*Lin. Jerd.* 475), is spread abundantly throughout the district in gardens, groves, and hillside brushwood. It is seen either alone or in pairs, never in flocks. It feeds on the ground, entirely on insects, and has a rather sweet song. In this district these robins breed almost always in holes of trees in April and May. One nest found by the writer at Dâpoli was lined throughout with the long thread-like leaves of the castardina tree,

¹ *Sub-Fam.*—**IRENINÆ.**—The Fairy Bluebird, *Irene puella*, (*Lath. Jerd.* 469), is known to come as far north as the Savantvâdi forests. It is therefore probable that like the racket-tailed drongo, it may be found in the extreme south of the district. But as its occurrence is uncertain, it is excluded from the local list.

Casuarina equisetifolia. They lay four or five greenish white eggs with reddish brown markings. While nesting they are exceedingly quarrelsome, and will attack fiercely any birds that may, unconscious of committing any trespass, approach their lair. On one occasion an innocent myna was busy feeding on the ground just below the hole of a tree in which a hen robin was sitting. Without other provocation the choleric little robin flew out of her hole straight at her enemy, and after administering a vicious peck, was again snugly ensconced in her nest, before the poor dazed myna had time to see his aggressor. Quickly recovering his senses, he caught sight of a squirrel innocently feeding close by, and amply vindicated his honour by fiercely attacking the bystander, passing on the peck with interest and speedily driving his supposed enemy off the field. The magpie robin is called the *chitko* by Konkani Maráthás.

The Shama, *Cercotrichas macrura*, (*Gmel. Jerd.* 476), is rare, having been found only at Rájápur. But it is common at Sávantvádi and probably extends throughout the Sahyádrí range and the well wooded country at its base.

The Indian Black Robin, *Thamnobia fulicata*, (*Lin. Jerd.* 479), is also common on the rocky scrub-covered hillsides, overhanging creeks and rivers, and is also met with in and about villages. Neither this nor the last, both of which are permanent residents, affects thick forests. Its habits are similar to those of the magpie robin. The males are shining black with a white wing spot, and the females dingy brown with chestnut under-tail coverts. These robins also breed on ledges of rocks in April and May.

The Whitewinged Black Robin, *Pratincola caprata*, (*Lin. Jerd.* 481), is also plentiful in suitable localities, but is less widely spread than either of the preceding species. It is found either alone or in pairs, on rocky bushy hills, but not in dense forest. It is a permanent resident, and is a less familiar bird than either *Copsychus saularis* or *Thamnobia fulicata*.

The Indian Bushchat, *Pratincola indica*, (*Blyth. Jerd.* 483), the same as or very nearly allied to the English meadow warbler, or whinchat, is found sparingly during the fair season in open ground, patches of tillage, and stony hillsides, but is nowhere abundant. It avoids forests, woodlands, and high trees, perching on walls and low bushes. The whinchats come early in October, the males in brown winter plumage. They stay till late in March, when most of the males are getting their black caps, wings, and tails, and bright rust-red breasts. The Nilgiri Black Robin, *Pratincola bicolor*, (*Sylv. s. Jerd.* 482), nearly allied to *Pratincola caprata*, but larger, occurs at Mahábleshvar, and probably extends to parts of Ratnágiri; but it has not hitherto been discriminated. No wheatears appear to visit Ratnágiri.

Sub-Fam.—RUTICILLINÆ.—The Indian Redstart, *Ruticilla rufiventris*, (*Vieill. Jerd.* 497), is a rather rare bird, very seldom seen in this district. It is a winter visitant only. It is much more common in the adjoining district of Sátára, to the east of the Sahyádrí range.

The Blue Woodchat, *Larvivora superciliaris*, (*Hodgson. Jerd.* 507), has been obtained at Gotna in the Sangameshvar sub-division, the

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Birds.

Ruticillinae,

only village in this district whose lands overstep the western water-shed of the Sahyâdris. It has not been found elsewhere in the district.

The Indian Bluethroat, *Cyanocula svecica*, (*Lin. Jerd.* 514), is found sparingly in the Dâpoli sub-division, and probably elsewhere. It frequents reeds and long grass on the banks of river beds and mountain streams. According to Jerdon it is a cold weather visitant only.

Calamoherpinae,

Sub-Fam.—*CALAMOHERPINEÆ*.—Of the Large Reed Warbler, *Acrocephalus stentorius*, (*Henp and Ehr. Jerd.* 515), a single specimen has been obtained by the writer from some bushes on the river bank at Khed. There is no record of its occurrence elsewhere in the district.

The Lesser Reed Warbler, *Acrocephalus dumetorum*, (*Blyth. Jerd.* 516), an active little bird, is a regular cold weather visitant, but nowhere very common. It frequents alike trees, bamboo thickets, hedgerows, and high grass and sedge by rivers, ponds, and rice fields. When freshly moulted the prevailing colour of the head and upper plumage is a warm olive brown, which changes gradually to a plain earth brown. It has a peculiar note which has been happily likened to the sound made by a flint and steel.

Drymoicinae,

Sub-Fam.—*DRYMOICINÆ*.—The Indian Tailor Bird, *Orthotomus sutorius*, (*G. R. Forster. Jerd.* 530), is nowhere very abundant, but is found sparingly in gardens, hedgerows, and all well wooded tracts, both inland and near the coast. It is usually seen in pairs. The tailor birds are active restless little creatures, flitting incessantly from branch to branch and chirping loudly. Both sexes have rufous heads, and are olive green above and white beneath. The two central tail feathers of the male are considerably lengthened. They breed during the rainy months. The well known nest, a marvel of skill, is made by sewing one or more leaves, according to their size, into a round cup, the stitches being made with cobweb or cotton thread, or any similar material that comes handy, neatly fastened off and knotted. In the hollow thus formed, a soft deep nest of cotton wool is laid. The eggs are tiny white ovals, clouded and streaked with pale reddish brown.

The Ashy Wren Warbler, *Prinia socialis*, (*Sylves. Jerd.* 534), is also sparingly distributed, frequenting grassy hillside woodlands and low bushy ground. Like the tailor bird it breeds during the early part of the rainy season, making a very similar nest. The eggs are brick-red.

The Malabar's Wren Warbler, *Prinia hodgsoni*, (*Blyth. Jerd.* 538), the smallest of the group of wren warblers, and distinguished from the last species by the possession of twelve instead of ten tail feathers, is perhaps the most common in this district. It is found in pairs or small parties, in bushes and trees all through the district. It is perhaps more arboreal than the ashy wren warbler, and less often seen in reeds and sedge. Its nest is also that of a true tailor bird, and the breeding season the same, but the eggs are pale blue.

The Rufous Grass Warbler or Pine-Pine, *Cisticola cursitans*, (*Frankl. Jerd.* 539), is found here and there throughout the district in long

grass, standing corn, or reeds, but is not plentiful. It is probably a permanent resident, but there is no record of its breeding in this district. It has a peculiar little jerking flight, as it flits from place to place among the blades of grass.

The Common Wren Warbler, *Drymœca inornata*, (*Sykes. Jerd.* 543 and 544), is found in corn fields, grass, hedgerows, and similar places, and is common in the northern sub-divisions. It appears to be a permanent resident. According to Mr. Fairbank, it breeds in the Deccan in August, in millet (*bújri*) crops, 'weaving its bottled-shaped nests,' and laying greenish blue eggs marked with purple brown.

The Great Rufous Wren Warbler, *Drymœca rufescens*, (*Hume. Jerd.* 544 *bis*), a larger race separated by Mr. Hume from the species described by Jerdon as *Drymœca longicaudata*, (*Tickell. Jerd.* 544), was found common by the writer in the brambles on the slopes of Fort Victoria, or Bánkot, and is probably common in similar localities in other parts of the district.

The Allied Wren Warbler, *Drymœca neglecta*, (*Jerd.* 546). A single specimen obtained by the writer at Khed has been identified by Mr. Hume as referable to the above species, which is now believed to be identical with the species described by Jerdon as the Jungle Wren Warbler, *Drymœca sylvatica* (*Jerd.* 545). These warblers are seen in parties of five or six birds, flying from bush to bush, very much after the manner of the Yelloweyed Babbler, *Pycnorhis sinensis*, whom they resemble in size and colouring. Doubtless other *Drymoipi*, not included in this list, occur in the district. They are a very puzzling family, and, as Mr. Hume remarks, "terribly want reviewing."¹

Sub-Fam.—PHYLLOSCOPINÆ.—Hypolais caligata. (*Licht. Jerd.* 553 *bis*). A single specimen of this Brown Tree Warbler has been obtained by the writer at Khed. Probably it will be found in other localities within the district.

Phylloscopinæ.

The Bright Green Tree Warbler, *Phylloscopus nitidus*, (*Lath. Jerd.* 559), is plentiful throughout the district in the cold weather coming early in October. But the bright colours seen on first arrival soon fade, not to return till after the next moult.

The Greenish Tree Warbler, *Phylloscopus viridanus*, (*Bly. Jerd.* 569), has also been obtained by the writer at Khed. It is very like the last species, but has at all times a greyer tint.

The Large Crowned Warbler, *Reguloides occipitalis*, (*Jerd.* 563) has been procured at Ratnágiri in the cold weather, but appears rare.

Other Tree Warblers, such as Sykes' Warbler, *Hypolais rama*, (*Sykes. Jerd.* 553), and the Brown Tree Warbler, *Phylloscopus brevirostris* (*Strickl. Jerd.* 554), both of which are included in the general Konkan list, probably visit this district in the cold weather. Frequenting high trees, they are easily overlooked, and when

¹ Major Lloyd includes in his Konkan list the Longtailed Wren Warbler, *Drymœca longicaudata* (*Tick. Jerd.* 544), as well as the Common Wren Warbler, *Drymœca inornata* (*Sykes. Jerd.* 543). These two species are now believed to be identical, *inornata* being the summer plumage of *longicaudata*. Stray Feathers, VII, 468.

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obtained are difficult to identify. Of the Grey Warblers, *Sylvinae*, no representative has yet been recorded in the district, though it is probable that the Lesser White Throat, *Sylvia curruca*, (*Gmel. Jerd.* 583) visits the district in the winter.

Sub-Fam. — MOTACILLINÆ. — The Pied Wagtail, *Motacilla maderaspatensis*, (*Gmel. Jerd.* 589), is the common wagtail of the district and a permanent resident. It is found on the banks of rivers and creeks, and in rice fields, either alone or in pairs. The plumage varies little at different seasons of the year, but the black is deeper and purer on the chin, throat, and breast during the summer months. This wagtail is said to breed on river banks during the hot weather.

The Blackfaced Wagtail, *Motacilla dakhanensis*, (*Sykes. Jerd.* 591 *bis*), is also plentiful in the cold weather, and is found in small parties in rice fields. It is seen only in its winter dress with grey head and white throat. It appears to be generally distributed, but is found more plentifully inland than near the coast.

The Grey and Yellow Wagtail, *Calobates melanope*, (*Pallus. Jerd.* 592), is also plentiful from September to May. It is found in the same situations as the pied wagtail, in rice fields, on banks of rivers and ponds, near the coast as well as inland.

The Ashyheaded Field Wagtail, *Budytes cinereocapilla*, (*Savi. Jerd.* 593), appears in small flocks in the cold weather, and feeds in open fields and bare plains. The plumage of this and other allied forms is very variable. It is distinguishable from the two preceding species by its elongated hind toe and claw.

The Blackbreasted Wagtail, *Limonidromus indicus*, (*Gmel. Jerd.* 595), has been found only at Rájápur to the south of Ratnágiri and must be a rare species. No other wagtails have been observed in this district, but others probably occur during the cold season. The Yellowheaded Wagtail, *Budytes calcarata*, (*Hodgk. Jerd.* 594), is included in the general Konkan list and may hereafter be discovered.

The Tree Pipit, *Anthus trivialis*, (*Linn. Jerd.* 597). The species of Tree Pipit found throughout this district is *Anthus trivialis*, which corresponds with the *Anthus arborcus* of Jerdon (597), and the bird which Sykes called *agilis*. The much greener Indian Pipit, *Anthus maculatus*, (*Hodgk. Jerd.* 596), which Jerdon erroneously, it appears, called *agilis*, has hitherto either not been found in this district or not discriminated, although it is very possible that both of these closely allied species may occur. The tree pipits come in small flocks in October, and frequent gardens and corn fields, feeding on the ground, but often perching on trees. They are common everywhere both on the coast line and inland, and stay till April.

The Indian Titlark, *Corydalla rufula*, (*V. M. Jerd.* 606), is also common throughout the district, frequenting rice fields, stubble, and open cultivated ground. It is probably a permanent resident, but no nests have been recorded in this district.

Ampilidæ.

Fam. — AMPILIDÆ. — The White-eyed Tit, *Zosterops palpebrosa*, (*Tem. Jerd.* 631). This lovely species has been obtained by Dr. Armstrong in the south of the district, and also by the writer at Khed. It appears to be rare.

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The Southern Yellow Tit, *Machlolophus aplonotus*, (*Bly. Jerd.* 648), This handsome little bird is common at Ratnágiri and generally throughout the district in well wooded country, and is a permanent resident. Like all other members of the family, these tits are gregarious, associating in small flocks, and hunting for fruit and insects on the high trees with great activity. Major Lloyd also gives the Indian Grey Tit, *Parus nipalensis*, (*Hodgson. Jerd.* 645) as a Konkan species. There is no record of it in Ratnágiri.

Tribe — CONIROSTRES.

Sub-Fam. — CORVINÆ. — The Indian or Bowbilled Corby, *Corvus macrorhynchus* (*Wagl. Jerd.* 660), is abundant in this district in almost every village, and is usually associated with the Common Crow, *Corvus splendens*. In some towns and villages both species are equally common, and this is the case at Ratnágiri. But some villages are colonized more or less exclusively by one or the other species. In the town of Khed, for instance, the bow-billed corbys have a monopoly, and common crows are seldom seen. In others again the common crows greatly preponderate. The bowbilled corbys breed in this district from February to the end of May. They make rough stick nests lined with hair, fibre, or similar material. The eggs, usually four in number, are greenish blue with dusky spots, and occasionally, though rarely, pure unspotted blue. This crow is by the natives called the *dom káula*.

Corvinae.

The Common or Ashynecked Indian Crow, *Corvus splendens* (*Vieill. Jerd.* 663), is equally abundant. This species nests in this district in April and May, and again in November and December, and it would thus seem as if they had two broods. They make similar nests to the corby's, and their eggs resemble the latter's in colour and marking, but are smaller and, as a rule, perhaps less elongated. Both the common crow and the corby roost in large companies, sometimes in clumps of trees near villages, but quite as often in isolated groves far from human habitations. They may always be seen congregating soon after sunset, and in straggling parties flying off with much clatter to their chosen roosts, often some miles distant from the scene of their daily depredations. Mangrove swamps in large tidal creeks, far removed from all habitations, are often patronized by crows. There is one such roost in a mud island at the meeting of the Vashishti and Jagbudi rivers. Here nightly, thousands of crows, cormorants, snake birds, egrets, herons, ibises, and other birds meet, and hold high revels till long after dark, making night hideous with their screams. The stunted mangroves literally groan under the weight of myriads of occupants. The settling down for the night is a work of time, and is only accomplished after incessant squabbles and a tedious and long continued process of summary ejections and hard-won recoveries. A moonlight visit and the report of a gun produce the wildest confusion. Rising in one vast scurried mass, flapping their wings, and screaming with all their might and main, the birds darken the sky, and raise a very babel round the head and ears of the adventurous intruder, refusing to be pacified at any price. Many minutes elapse before the least excitable members of the community resettle themselves; while the inevitable process of ousting and retaliation is repeated after each real or imaginary disturbance.

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Corvinæ.

The ashyncked crow is by the Maráthás distinguished from its congener by the name of *son-kávla*.

The Indian Magpie, *Dendrocitta rufa*, (*Scop. Jerd. 674*), is distributed in small numbers throughout the district in well wooded tracts, both inland and near the coast. Its peculiar and inimitable whistle always betrays its presence in a grove or forest. During the cold season it wanders about the country in small parties in search of food, fruit, and insects. It breeds in trees in April and May, making loose thick twig nests, and laying four or five eggs of pale salmon colour blotched and speckled with red. The natives call this bird the *Puritin* or washerwoman.

Sturninæ.

Sub-Fam.—STURNINÆ.—The Common Myna, *Acridotheres tristis* (*Lin. Jerd. 684*), is, as remarked in the introduction, comparatively scarce in this district, and is to a great extent replaced by the next species, the Dusky Myna. A few may be found here and there in the neighbourhood of large towns and villages, but in some localities they are entirely absent. This myna breeds in the rainy months in holes of trees, haystacks, and similar places, laying four or five glossy blue eggs.

The Dusky Myna, *Acridotheres fuscus*, (*Wagler. Jerd. 686*), is abundant throughout the district, and more especially in the well wooded tracts. Like the common myna it nests in the hot weather, April and May, in holes of trees. The eggs are usually five in number, and differ from those of the common myna only by being a trifle smaller. The blue colour is also perhaps a shade deeper. These birds line their nests by stuffing the holes of the trees indiscriminately with a large loose mass of grass, fine sticks, and feathers, all jumbled together without any arrangement, and containing sufficient material to construct at least six proper cup nests for birds of their size. Both this myna and the common myna gather towards dusk, and roost in large flocks, and both feed on insects, fruit, and grain. The native name for both is *salunki*.

The Pagoda or Blackheaded Bráhmāni Myna, *Sturnia pagodarum* (*Gmel. Jerd. 687*), is distributed partially, being somewhat common in the southern sub-divisions and at Ratnagiri during the rains, and rare in the north. In young birds the long pendent silky black crest is wanting. This species may also often be seen feeding in company with the dusky mynas, both on the ground and in fruit trees.

The Greyheaded Myna, *Sturnia malabarica* (*Gmel. Jerd. 688*), is like the last very partially distributed, and is nowhere plentiful. A few birds may always be seen at Ratnagiri at the close of the rains, and most probably it is only a cold weather visitant. It is more arboreal in its habits than other mynas.

The Rosecoloured Starling, or Javari Bird, *Pastor roseus* (*Lin. Jerd. 690*), though not seen in such vast flocks as in the Deccan, comes in the cold weather in considerable numbers. When all the winter crops are cut, they repair to well wooded tracts, and during March and April feed largely on the insects that infest the blossom of the silk-cotton tree, *Bombax malabaricum*. They leave for their summer quarters late in April or early in May. The local Marátha name for this species is *kalpi*.

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Fringillidæ.

Major Lloyd included in the general Konkan list the Southern Hill Myna, *Eulabes religiosa*, (*Lin. Jerd.* 692), as found in the Sahyádrí forests to the extreme south. Probably this species does not extend so far north as Ratnágiri.

Fam.—FRINGILLIDÆ. *Sub-Fam.*—PLOCEINÆ.—The Common Weaver Bird or Little Baya, *Ploceus philippinus*, (*Lin. Jerd.* 694), is abundant everywhere. In the cold weather vast flocks may be seen scouring the country in search of grain. They are gregarious in roosting, and usually frequent the same trees night after night. The mangrove swamps in tidal creeks are frequently used for this purpose. They breed in August and September. The long tubular retort-shaped nests are too well known to need description. In the neighbourhood of the coast, cocoanut palms are usually chosen for building sites. Inland, where palms are scarce, the *bor*, *Zizyphus jujuba*, the *khair*, *Acacia catechu*, and the tamarind are favourite trees. Several nests are usually found in the same tree, and a few of the unfinished nests, wanting the tubular entrance, which the cocks are fancifully said to build solely for their own use and edification, are always to be seen. Where coir fibre is to be had, it seems exclusively used in building the nests. Where there is no coir the birds use strong grass. As Dr. Jerdon pointed out, the nests made of coir are always less bulky than those made of grass. The eggs, usually two, are dead white ovals. The natives call this species the *blorade*, a term applied in the Deccan to the rosy pastor.

Sub-Fam.—ESTRELDINÆ.—The Blackheaded Munia or Amadavad, *Amadina malacca*, (*Lin. Jerd.* 697), is rather rare in this district, although Jerdon says it is abundant on the Malabár coast. A few specimens have been obtained at Ratnágiri, where they were found in the bushes growing in the salt marshes fringing one of the tidal backwaters. The crops of those examined were found full of grass seeds. As only a few birds were seen, and there is no record of their occurrence elsewhere in the district, these individuals were probably stragglers.

Estrelinæ.

The Spotted Munia, *Amadina punctulata*, (*Lin. Jerd.* 699), is abundant in certain localities, but partially distributed. At Khed it is very common in the cold weather associating in considerable flocks, and frequenting corn fields, threshing floors, and rick yards. It appears to keep to well wooded country, and to avoid the immediate neighbourhood of the coast. It is probably a permanent resident.

The Whitebacked Munia, *Amadina striata*, (*L. Jerd.* 701), is common everywhere in gardens, orchards, and thin bush, from the coast to the Sahyádris. Like other munias, except in the breeding season, it is social in its habits. Its nests are found at various times of the year. In Dápoli eggs have been found in October, and young birds in January. A nest was also found to be occupied by a pair of these munias in April, but apparently only as a roosting place, as although this nest was twice revisited, no eggs were discovered. The nests are globular balls of grass, loosely put together with a small side entrance, and covered outside with dry blades of *náchai*, *Eleusine coracana*, or some similar cereal. The eggs are small white ovals.

The Pintail Munia, *Amadina malabarica*, (*Lin. Jerd.* 703), is found here and there throughout the district, but is not common. The

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Passerinæ.

eggs of this species have been found in January. Both nests and eggs closely resemble those of the preceding species. In the general Konkan list Major Lloyd includes the Green Waxbill, *Estrela formosa*, (*Lath. Jerd. 705*). No specimens of this bird have yet been obtained in Ratnágiri.

Sub-Fam.—*PASSERINÆ.*—The House Sparrow, *Passer domesticus*, (*Lin. Jerd. 706*), is fortunately comparatively a scarce bird in this district. It is only met with in some of the larger towns and villages, and is nowhere unpleasantly plentiful or confiding. In Ratnágiri itself it is scarcely ever seen. They build in the hot weather in thatched roofs and in holes of walls, and the eggs are not distinguishable from those of its familiar English relative.

The Yellownecked Sparrow, *Gymnoris flavicollis*, (*Frankl. Jerd. 711*), is also scarce, but appears to be generally distributed throughout the district.

Emberizine.

Sub-Fam.—*EMBERIZINÆ.*—The Blackheaded Bunting, *Euspiza melanocephala*, (*Scop. Jerd. 721*), is the only bunting that has been found in the district. The writer obtained a single specimen at Khed in March from a small flock that were found feeding in a field threshing floor. It has not yet been observed elsewhere.

Fringilline.

Sub-Fam.—*FRINGILLINÆ.*—The Common Rose Finch, *Carpodacus erythrinus*, (*Pal. Jerd. 738*), has been found in Chiplun in the cold weather, but appears to be rare. Major Lloyd includes in the general Konkan list the Pinkbrowed Rose Finch, *Propasser rhodocrous*, (*Vig. Jerd. 742*), from Mátherán. It has not been found in Ratnágiri.

Alaudine.

Sub-Fam.—*ALAUDINÆ.*—The Rufous-tailed Finch Lark, *Ammomanes phoenicea*, (*Frankl. Jerd. 758*), abundant in the Deccan is rare below the Sahyádris. According to Jerdon, it is unknown on the Malabár coast. Specimens have been found at Dápoli, and it is probably sparingly distributed in other localities.

The Blackbellied Finch Lark, *Pyrrhulauda grisea*, (*Scop. Jerd. 760*). This little lark, called by the natives *bhútko*, is abundant throughout the district. It is especially plentiful on the bare laterite plateau which lies immediately above the station of Ratnágiri, and numbers of nests may be found here in October and November. These nests are invariably placed on the bare ground under the partial shelter of a stone. No hollow appears to be scooped out in the ground itself, but a few chips of crumbling laterite are usually scraped up to form a tiny wall all round the ill-concealed nest. The nest itself is a soft little pad of fine grass, usually containing as a lining a few pieces of wool, often shreds stolen from native blankets, *cámbilis*. Two eggs only are laid, which are typically greenish white, more or less speckled and blotched with brown. These poor little larks have many enemies. Snakes and cowherds destroy their eggs, and if they are lucky enough to get safely through the dangers of brooding, the unprotected nestlings have small chance of escaping from the clutches of merciless Bráhmání kites, and keen-eyed harriers, who at this time regularly beat and square every inch of the bare rocky plains in search of so inviting a feast. This species has probably two broods in the year, and Jerdon states that in the Deccan it breeds from January to March. This finch lark is one of the many species erroneously called ortolans by Europeans in India.

The Southern Crown Crest, *Spizalanda malabarica*, (*Scop. Jerd.* 765 *bis*), is common throughout the district in open plains, rocky plateaus, and grassy table-lands. It is a good songster, and sings loudly on the wing. It breeds in September, October, and November, at the same time and in very similar situations as the little Finch Lark, and has a second brood in February. Sometimes a little more attempt is made to hide the nest, which is now and then placed under cover of grass. At other times nests are found on the bare rock, sheltered by a stone or a clod of earth. These nests are always placed in a slight hollow of the ground, either natural or artificial, and are made entirely of grass, coarse grass being used outside and a finer grass inside. Two or three eggs are laid. The ground colour is greyish white, and the eggs are speckled with various shades of brown and inky purple. It is not uncommon to find single eggs of this species laid prematurely on the bare rock without any nest having been prepared. The Maráthás call this species *chéndúl* and *ghorpi*.

The Indian Skylark, *Alauda gulgula*, (*Frankl. Jerd.* 767), is found in similar situations to the crown crest, whom it resembles in its general appearance and crested head, but from which it may easily be known by its much longer hind claw. This species appears to be rare and has been observed only in the south of the district. Two races of skylark were separated by Jerdon as *Alauda gulgula* (767) and *Alauda malabarica* (768). Both have been separately enumerated in the general list of Konkan species. But it is now generally held that *Alauda malabarica* is not entitled to rank as a distinct species.

Order — GEMITORES.

The pigeons and doves found in this district comprise two species of green pigeon, one wood pigeon, the blue rock pigeon, five turtle doves, and one ground dove. Of these only the southern green pigeon and the spotted dove are at all common or abundant, though the common ringdove, *Turtur risoria*, occasionally visits the more open parts of the district in large flocks during the cold weather. The blue rock pigeon, and the little greyfronted green pigeon, *Osmotreron malabarica*, are more or less scarce, while the remaining species are all rare.

Fam. — *TRERONIDÆ*. — The Southern Green Pigeon, *Crocopus chlorigaster*, (*Blyth. Jerd.* 773), is found abundantly, both inland and near the coast, in all well wooded tracts. They associate in flocks throughout the greater part of the year, wandering far in search of fruiting trees. A banyan or a *pípāl*, or a large *ber*, *Zizyphus jujuba*, with ripe fruit is sure to draw them, and if undisturbed they will spend hours feeding in company with numerous perchers. They roost in large parties in thick groves and temple forests. As a rule they are very shy and easily disturbed. Their flesh is good eating, but perhaps inferior to that of the blue rock pigeon. The native name is *phusára*.

The Malabár or Greyfronted Green Pigeon, *Osmotreron malabarica*, (*Jerd.* 775), is found both north and south in the inland well wooded tracts, but is never seen near the coast. It associates in considerable flocks in groves and forests, but is by no means common. The eyes both of this and the last species are exceedingly

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beautiful, an inner ring of crimson enclosed in an outer circle of blue, which, when blended, give a violet hue to the whole iris.¹

Fam.—*COLUMBIDÆ.* *Sub-Fam.*—*PALUMBINÆ.*—The Nilgiri Wood Pigeon, *Palumbus elphinstonii*, (*Sykes, Jerd.* 786), has been obtained in the Chiplun sub-division in the Sahyādri forests and no doubt occurs all along the range. It is well known at Mahābleshtar.

Sub-Fam.—*COLUMBINÆ.*—The Blue Rock Pigeon, *Columba intermedia*, (*Strickl. Jerd.* 785), is comparatively scarce in this district, as are several other grain-feeding birds. The land is too poor for them, and the inferior hill-grown grain, which is the staple produce of the rugged barren soil, is ill suited to its taste and voracious appetite. Wisely therefore the blue rock prefers the Deccan with its rich millet crops and the snug holes in its numerous wells and temples. Here and there a few small colonies have been established. At the island fort of Suvarnādurga a few pigeons are always to be found living in holes of the massive old sea walls, and wilder than the wildest of English wood pigeons. At Chiplun there is a small settlement, and at several places in the Sahyādri range they may be seen in the holes and crevices of perpendicular scarps, where there is a perennial fall of water. There is also a large colony of pigeons inhabiting the rocks off Vengurla, twelve miles or so from the mainland. During the height of the south-west monsoon, the strong wind makes it difficult for the birds to return to their island home after a flight to the mainland, and it is said that during the fair season they hoard grain in their homes for use during the stormy weather. The fact requires to be verified. If true, it gives a good illustration of the development of a special instinct to meet exceptional needs.

Turturinae.

Sub-Fam.—*TURTURINÆ.*—The Rufous Turtle Dove, *Turtur meena*, (*Sykes, Jerd.* 793), is common at Mahābleshtar, and all along the crest of the Sahyādri range. It can hardly be called a Ratnāgiri species, as it has been found only at Gotna in Sangameshtar, the one Ratnāgiri village that lies east of the Sahyādri water-shed.

The Little Brown Dove, *Turtur senegalensis*, (*L. G. Jerd.* 794), has also been obtained only at Gotna, and must therefore be considered a mere straggler. Throughout the rest of the district it is entirely replaced by the next species. It has, however, been found at Sāvāntvādī.

The Spotted or Speckled Dove, *Turtur suratensis*, (*Gmel. Jerd.* 795), is the common dove of this district, and is abundant everywhere, almost entirely replacing the little brown dove. The spotted dove's nests are found at all times. Like all the family, it lays two glossy white eggs. The nests are thin flat stick platforms, so thin at the bottom that it is always a wonder that the eggs do not tumble through, and so flat that the eggs seem always in danger of being rolled over the sides. Cactus bushes and low trees are the favourite sites for their nests. The spotted dove is called *kāda* by the Konkani as well as the Deccani Marāṭhās.

The Common Ring Dove, *Turtur risorius*, (*Lin. Jerd.* 796), occasionally in large flocks visits the plains and low lands in the

¹ The Green Imperial Pigeon, *Carpophaga aenea*, (*L. Jerd.* 786), is also included in the general Konkani list, but has not been observed in the Ratnāgiri district.

cold months, disappearing entirely at the approach of the hot weather, and in all probability returning to the Deccan plains to breed. They feed in large parties on the bare stubble, keeping to the open cultivated plains, and avoiding thick forests.

The Red Ring Dove, *Turtur tranquebaricus*, (*Herm. Jerd.* 797).

A pair of this pretty species was seen by the writer at Khed at the end of March, out of which one was secured as a specimen. There appears to be no other record of its occurrence in any part of the Konkan.

Fam.—GOURIDÆ.—The Emerald Dove, *Chalcophaps indica*, (*Lin. Jerd.* 798), has been found on the north bank of the Shástri river, about twelve miles from the coast. It has not been found elsewhere; but as it usually affects thick forests it may perhaps have been overlooked.

Order—RASORES.

RASORES.—The district is poorly supplied with gallinaceous birds. Sand grouse, Painted francolins, and Grey partridges are entirely wanting, and Grey and Rain quail are so scarce that they are hardly worth the trouble of beating for. The only game bird that is at all plentiful or common, is the pretty little jungle bush quail or dwarf partridge, found on all the bushy hill sides that overhang the deep valleys and ravines intersecting the rugged country. Jungle Fowl and Spur Fowl are rarely seen away from the Sahyádrí forests, while Pea Fowl are, though more widely distributed, nowhere plentiful. The following species are known to occur :

Fam.—PHASIANIDÆ. *Sub-Fam.*—PAVONINÆ.—The Common Peacock, *mor*, *Pavo cristatus*, (*Lin. Jerd.* 803), is found sparingly throughout the district in suitable localities. The steep slopes that overhang the large tidal creeks, if well clad with trees and bushy undergrowth, usually contain peafowl, and any evening about sunset the birds may be seen and heard as they come down to the banks to feed. Inland they resort to large temple groves with luxuriant undergrowth, hillside forests, and well wooded ravines. In no part of the district are they tamed or in any way encouraged by the natives, and consequently wherever found they are wild and difficult to approach. They breed during the rainy months, and the males begin to assume their splendid trains in May.

Sub-Fam.—GALLINÆ.—The Grey Jungle Fowl, *Gallus sonnerati*, (*Tem. Jerd.* 813), the *rán konabala* of the Maráthás, is plentiful throughout the Sahyádrí range in the tract known as the Konkan range crest, *Konkan-ghát-máhlá*, but is scarcer on the western slopes, which alone fall within Ratnágiri limits. A few stragglers are sometimes seen or heard in the larger and higher hills, which, though detached from the main range by steep valleys, are yet united by unbroken belts of forest. No jungle fowls are found in any of the isolated forests between the base of the Sahyádris and the sea. In the Sahyádris the eggs of this species are found usually in April or May. Eggs are occasionally set under domestic hens, but the chicks are exceedingly difficult to rear in confinement. The peculiar broken crow of the grey jungle cock is well known. To the traveller climbing the Sahyádrí hills, and passing step by step from the enervating heat of the plains to the cool bracing

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mountain air, the crowing of the cocks and the note of the green barbet are among the most welcome sounds that fall on his ear.

The Red Spur Fowl, *Galloperdix spadiceus*, (*Gmel. Jerd.* 814), is abundant in all the thick forests of the Sahyádrí range, but like the grey jungle fowl, more so on the summit of the range than in the western slopes. A few of these birds are also to be found here and there in large temple forests in the *Thal Konkan*, or country below the *Glúts*; but they are rare in such localities, and, as a rule, are seldom found beyond the evergreen forests of the main Sahyádrí range. Keeping to thick cover and running at the slightest alarm, they are difficult birds to shoot, except in the grey of the morning before they leave their roosts on the trees, or unless with the aid of dogs to flush and tree them. Spur fowls are by the natives called *shakútri*.

Tetraonidae,

Fam.—TETRAONIDÆ. *Sub-Fam.*—PERDICINÆ.—The Jungle Bush Quail, or Dwarf Partridge, *Perdica asiatica*, (*Luth. Jerd.* 826, or *Perdica cambayensis* apud Jerdon), is plentiful on all the scrub-clad hillsides of the district from the coast to the Sahyádris, and is a permanent resident. Small coveys are constantly flushed in walking through thin brushwood and patches of tillage on the borders of open forest. When first flushed, they rise together and fly to the thickest cover they can find, whence they are difficult to dislodge. When separated, they call eagerly and incessantly to their companions, and if not disturbed, will very quickly reunite. They feed chiefly in the mornings and evenings in forest glades, hill paths, and stubble, and may often be seen taking dust-baths on the roads that cut through the forest. The plumage of the males, females, and young birds differs considerably, and the former with their pencilled black and white breasts are very handsome. Numbers of these bush quail, *lúra*, are caught by natives on dark nights with the aid of torches. Huddled together in a compact little bunch, and completely dazed by the strange light, the birds make little or no attempt to escape and fall an easy prey to those who are lucky enough to find them. The eggs of this species have been found in January. They are of a pale café-au-lait colour. In the general Konkan list the following species of *Perdicinæ* are included. The Painted Partridge, *Francolinus pictus*, (*Jerd. and Selb. Jerd.* 819); the Rock Bush Quail, *Perdica argoonda* (*Perdica asiatica* apud Jerdon, *Jerd.* 827); and the Painted Bush Quail, *Microperdix erythrorhynca*, (*Sykes. Jerd.* 828). None of these species are known with certainty to occur in this district. Probably the Painted Bush Quail is to be found in the Sahyádrí forests; but the Painted Francolin is not met with in any part of the district. The Rock Bush Quail also appears to be entirely replaced both to the north and south of the district by the Jungle Bush Quail. The specimens of the latter sent to Mr. Hume for examination were pronounced to be so dark a race as to be almost a distinct species.

Coturnicineæ.

Sub-Fam.—COTURNICINÆ.—The Large Grey Quail, *Coturnix communis*, (*Bonn. Jerd.* 829), is very scarce in this district. A few stragglers are met here and there, and at one or two localities, as at Chiplun and Khed, a few brace may be flushed in the cold weather in the fields of *tur*, *Cajanus indicus*, and hemp and other winter crops

grown in the alluvial soil near the town; but a large bag of quail is at no time possible.

The Blackbreasted or Rain Quail, *Coturnix coromandelica*, (*Gmel. Jerd.* 830), is equally scarce, but is occasionally flushed when beating for grey quail. It is not known whether the few individuals found remain to breed in the district or not, but it is probable that they do so.

Fam. — TINAMIDÆ. — The Blackbreasted Bustard Quail, *Turnix taigoor*, (*Sykes. Jerd.* 832), has been obtained at Khed in the tur crops, by the banks of the Jagbudi river, and is probably to be found in similar places throughout the district. The absence of the hind toes in this and the following species distinguishes them at once from all other quail. The females of this species are larger and more boldly marked than the males.

The Button Quail, *Turnix dussurieri*, *dorræ*, (*Tent. Jerd.* 835), is widely distributed, but is nowhere common or abundant. It is found in groves, thin brushwood, and tilled land. It is almost always flushed singly, rarely in pairs, and never in coveys. It is probably a permanent resident.

Order—GRALLATORES.

GRALLATORES.—The numerous tidal creeks and backwaters, whose soft mud banks harbour myriads of molluscs, crabs, aquatic insects, and other slimy but inviting morsels, and the rice fields, mangrove swamps, and salt marshes with which the coast portion of the district abounds, attract a large and motley company of waders or shore birds. The only shooting worth the name throughout the district is furnished by representatives of this order. The more exclusively aquatic waders are naturally more numerous, while those species which delight in more or less dry open plains are comparatively scarce. Thus amongst the tribe of *Pressirostres*, the florikin, the stone plover, the courier plover, and the black-sided and yellow-wattled lapwings are all rare birds, while the Indian bustard, the *Saras*, the common and the demoiselle crane and other birds of this order, who prefer land to water, are unknown. Again golden plover and the pretty little ringed plover, who divide their attentions equally between river sides and grassy plains, are not uncommon; while the little sand plovers and the red-wattled lapwings, who are never seen far from water, are abundant in all suitable places. Amongst the *Longirostres*, snipe, sandpipers, and curlews are numerous, while the godwits and stints are either rare or entirely absent. The tribe of *Latitores* including the jacanas, water-hens, coots and rails, is hardly so well represented as might be expected in a district whose humid climate and considerable area of swampy land seem to afford exceptionally favourable conditions for the existence of most of the species of the tribe. One species of jacana, two water-hens or gallinules, the bald coot and three rails are all that are with certainty known to occur, and most of these are

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rare. But the gallinules and rails are inveterate skulkers and difficult to find, and probably two or three other species of the latter occur and have been overlooked. Amongst the *Culicrostres* only one species of stork occurs. The herons and egrets are numerous represented, the European bittern being the most notable exception. The pelican ibis, the shell ibis, and the black ibis or king curlew so common in the Deccan, are, though their occurrence might be fairly expected, not found in the district.

Tribe—PRESSIROSTRES.

Otitidae.

Fam.—*OTITIDÆ*.—The Lesser Florikin, *Sypheotides aurita*, (*Iath. Jerd.* 839), is exceedingly rare in this district. A straggler is now and then, perhaps once in two or three years, flushed and bagged when beating for quail in the fields of *tur* and *porta* near Chiplun. A florikin has also been shot in a nursery belonging to the forest department at Dápoli.

Cursoridae.

Fam.—*CURSORIDÆ*.—The Indian Courser, *Cursorius coromandelicus*, (*Gmel. Jerd.* 840), so plentiful in the Deccan plains and uplands, is also very rare below the Sahyádris. A few are to be found on the laterite plateau above the station of Ratnágiri, and individuals are occasionally seen in the dry table-lands in the Dápoli and Chiplun sub-divisions.

Glareolidae.

Fam.—*GLAREOLIDÆ*.—The Large Swallow Plover, *Glareola orientalis*, (*Leach. Jerd.* 842), has been procured at Ratnágiri in August. Only two birds were seen and the species is rare.

Charadriidae.

Fam.—*CHARADRIDÆ*. *Sub-Fam.*—*CHARADRINÆ*.—The Grey Plover, *Squatarola helvetica*, (*Gmel. Jerd.* 844), is also rare. In the cold season, a flock is now and then seen near the coast, or on the banks of the large tidal creeks.

The Golden Plover, *Charadrius fulvus*, (*Gmel. Jerd.* 845), is, throughout the district, found in moderate sized flocks on the muddy banks of tidal rivers. At high tide they resort to rice fields and open plains in the neighbourhood of the rivers, returning to their favorite banks of mud and slimy sedge with the receding tide. According to Jerdon, "many of this species breed in this country even towards the south." This statement has never been positively verified. If they do not breed in this district, it is at least certain that many birds arrive very early and leave very late. Golden plovers are constantly seen in this district in their handsomenuptial plumage late in May, and they reappear at Ratnágiri and Dápoli early in September, if not sooner.

The Large Sand Plover, *Ægialitis geoffroyi*, (*Wagler. Jerd.* 846), has been found by the writer at Guhágir in March in company with small flocks of the lesser sand plover and the Kentish ringed plover.

The Lesser Sand Plover, *Ægialitis mongola*, (*Pallas. Jerd.* 847), is very abundant in the cold weather on the sea shore and up the tidal creeks, but never extending far inland. It associates in large flocks and is exceedingly confiding in its nature. It is seen only in its plain winter plumage.

The Kentish Ringed Plover, *Ægialitis cantiana* (*Lath. Jerd.* 848).

A flock of these birds was seen by the writer in March on the sea shore at Guhagar, and one specimen was obtained. They have not been recorded from any other locality, but probably frequent other parts of the coast, both north and south.

The Indian or Small Ringed Plover, *Ægialitis curonicius*, (*Gmel. Jerd.* 849), the Ring Dottrel, as it is often called, is also common, frequenting river banks and rice fields. Its neat and conspicuous black and white collar at once distinguishes it from the lesser sand plover. As a rule, also, it is found on drier land and in smaller flocks than the sand plover. This species is probably a permanent resident.

Sub-Fam. — VANELLINÆ. — Of the Black-sided Lapwing, *Chelusia gregaria*, (*Pallas. Jerd.* 852), two individuals were in October 1878, seen on the bare laterite plateau above Ratnágiri. One specimen was secured. There appears to be no other record of its occurrence in the Konkan.

The Red-wattled Lapwing, *Lobivanellus indicus*, (*Bodd. Jerd.* 855), the well known "Did-you-do-it" is abundant everywhere by rivers, streams, tanks and rice fields, and is a permanent resident, breeding in the bare stubbles in April and May, and laying typical plovers' eggs. This and all other lapwings are called *tivri* by the Maráthás. The Yellow-wattled Lapwing, *Lobipluia malabarica*, (*Bodd. Jerd.* 856), is comparatively scarce. A pair may now and then be found on the drier uplands and the laterite plateaus near the coast, but the climate of the district is too damp to attract them. The few that are seen appear to be permanent residents.

Sub-Fam. — ESACINÆ. — The Indian Stone Plover, *Ædicnemus scolopax*, (*S. G. Gm. Jerd.* 859), the Common Thick-knee, or Stone Curlew, or Norfolk Plover, or Bastard Florikin, is a very rare bird in this district. A straggler has now and again been obtained at Chiplun, and one or two are usually to be found on the laterite plateau above the Ratnágiri station, keeping under cover of the thin stunted bushes and coarse grass. Throughout the adjoining district of Sátara it is a common bird.

Fam. — HÆMATOPODIDÆ. — The Oyster Catcher or Sea Pic, *Hæmatopus ostralegus*, (*Lin. Jerd.* 862), visits the coast and large tidal creeks in small flocks in the cold season. It comes in September and leaves in March. At low tide it feeds on the mud banks, picking up molluscs and shell fish, frequently standing in the water up to its knees, probing with its long bill in the mud. It is a very shy bird, and specimens are difficult to procure.

Tribe — LONGIROSTRES.

Fam. — SCOLOPACIDÆ. *Sub-Fam.* — SCOLOPACINÆ. — The Pintailed Snipe, *Gallinago sthenura*, (*Kuhl. Jerd.* 870), comes in great number in the cold weather towards the end of October or the beginning of November. The habits and haunts of this species are exactly similar to those of the common snipe, from which but few snipe shooters distinguish it. It appears to be equally, if not more common, throughout the district, and a moderate bag of snipe is usually found to contain about an equal proportion of each species. In the early months of the regular

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Scolopacine.

snipe season, November and December, the district, after an average rainfall, contains innumerable snipe grounds; for, in addition to the salt marshes and sedge banks of the tidal creeks, there are, at this period of the year, thousands of acres of flooded rice fields. The snipe with so many choice feeding grounds are consequently much scattered, and a great deal of laborious walking through sticky morasses is necessary to secure even a moderate bag. By slow degrees the flooded area contracts, and in January and February the few large grounds that still hold water are literally fall of snipe. Both the pintail and common snipe remain in the district till the middle or end of March, a few stragglers delaying their departure till the middle of April.

The Common Snipe, *Gallinago gallinaria*, (*Gen. Jerd.* 871), comes at the same time as the last species, and is equally abundant.

The Jack Snipe, *Gallinago gallinula*, (*Lin. Jerd.* 872), is found sparingly, in company with other snipe, on all the larger snipe grounds in the district. They come earlier and leave later than their congeners.

The Painted Snipe or Rail, *Rhynchæa bengalensis*, (*Lin. Jerd.* 873), is occasionally flushed in swampy grass, rush, and sedge, when beating for common snipe, but they are nowhere abundant. The female is larger than the male, and more conspicuously marked. Its slow heavy flight, as it rises almost at the feet of the beaters, at once distinguishes this bird from the common and pintailed snipe. The local Marátha names for all species of snipe is *tibud*; but the ordinary Kunbi usually distinguishes them by the term *pán lúca*, water quail.

Numenius.

Sub-Fam.—NUMENINÆ.—The Curlew, *Numenius lineatus*, (*Cur. Jerd.* 877), is found in the cold weather on all large tidal creeks. On their first arrival, towards the end of September, many are seen feeding on open grassy plains and dry uplands, as at the station of Dápoli.

The Little Curlew or Whimbrel, *Numenius phaeopus*, (*Lin. Jerd.* 878), is also common in the cold weather, and feeds in small parties of three to six birds on the sand banks of the tidal estuaries. The Marátha name for both species is *káru*.

Tringæ.

Sub-Fam.—TRINGINÆ.—The Ruff, *Macetes pugnax*, (*Lin. Jerd.* 880), has been found in winter plumage at Ratnágiri in September. A single specimen only was seen and secured.

The Curlew Stint, *Tringa subarquata*, (*Godd. Jerd.* 882), visits Ratnágiri in small numbers in the cold weather.

The Little Stint, *Tringa minuta*, (*Less. Jerd.* 884), is also a cold weather visitant to Ratnágiri.

Totanus.

Sub-Fam.—TOTANINÆ.—The Spotted Sandpiper *Rhyacophilaglarcola*, (*Lin. Jerd.* 891), is by no means common, but one or two are occasionally found in the cold season by the edges of reedy ponds and in flooded rice fields. It is seldom if ever seen on the banks of tidal creeks.

The Green Sandpiper, *Totanus ochropus*, (*Lin. Jerd.* 892), is more plentiful in the district than the last, but is nowhere abundant. It frequents river banks, marshes, and rice fields. It is usually solitary.

Of the Common Sandpiper, *Tringoides hypoleucus*, (*Lin. Jerl.* 893), Jerdon remarks that in India it is perhaps the least common of the three sandpipers. As regards the Ratnāgiri district, this is incorrect, for the little 'snippet' is one of its most common and widely distributed birds. In the cold weather, throughout the length and breadth of the district, on the sandy beach, on rocks jutting into the sea, in the tidal estuaries, on sand and mud banks, in mangrove swamps and salt marshes, in rice fields and on margins of ponds, by mountain streams and rivulets, in short wherever there is water from a puddle to the ocean, this industrious and familiar little bird is found. On the other hand the spotted and green sandpipers are comparatively uncommon. These birds come early in the cold weather and stay till the beginning of May. The native name for all the sandpipers is *tirula*.

The Greenshanks, *Totanus glottis*, (*Lin. Jerl.* 894), is plentiful during the cold season on all the large rivers and tidal estuaries. It is usually alone, but occasionally congregates in moderate sized flocks.

The Redshanks, *Totanus calidris*, (*L. Jerl.* 897), is also plentiful in the winter on the muddy banks and lagoons of the tidal creeks. It is more gregarious in its habits than the preceding.

Fam. — HIMANTOPODIDÆ. — The Stilt or Longlegs, *Himantopus candidus*, (*Bonnot. Jerl.* 898), is rather a rare bird in this district. One or two stragglers are occasionally seen during the cold season on the larger creeks, but they seldom make any stay, and are never in large flocks.

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Birds.
Totaninæ.

Himantopodidæ.

Tribe — LATITORES.

Fam. — PARRIDÆ. — The Pheasant-tailed Jacana, *Hydrophasianus chirurgus*, (*Scop. Jerl.* 901), is during the cold season found in small flocks throughout the district in large ponds overgrown with weeds and lilies, amongst which by means of its long toes, it picks its way with ease and rapidity. The jacanas are shy and restless, always on the alert, rising with a loud plaintive cry, and circling round the pond several times before again alighting. They leave the district in the hot weather, before they assume their summer garb and lengthened tails. The Bronzewinged Jacana, *Parra indica*, (*Lath. Jerl.* 900), included in the general Konkan list, has not hitherto been observed by the writer anywhere within the limits of the Ratnāgiri district.

Parridæ.

Fam. — RALLIDÆ. *Sub-Fam.* — GALLINULINÆ. — The Bald or Common Coot, *pinkumbli*, *Fulica atra*, (*Lin. Jerl.* 903), is said to have been very plentiful some years ago in the lagoons at the meeting of the Vāshishti and Jagbudi rivers. Of late years the coots have forsaken their old haunts, and saving an occasional straggler, none are now seen. It is also noticeable that with the desertion of the coots, who are usually considered good decoys, the number of ducks that visit the same locality has also conspicuously decreased. A solitary individual is seen now and then in large reedy ponds in the cold season, but the species is now decidedly rare.

Rallidæ.

The Water Hen, *Gallinula chloropus* (*Lin. Jerl.* 905). A pair or more of water hens may be found in almost any little frequented reedy pond. They are great skulkers, and are flushed with difficulty. Wherever found they are probably permanent residents. Their

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native name is *gajra*, a term which, according to Jerdon, is in Sind also applied to its smaller congener *Gallinula burnesii*, if the latter be a distinct species, which is now doubted.

The Whitebreasted Water Hen, *Erythra phœnicura*, (*Pennant. Jerd.* 967), is distributed sparingly throughout the district, being more plentiful near the coast than inland. It is found chiefly in mangrove swamps and bushes by the banks of tidal creeks. It breeds during the rainy months in hedges and thickets far from water. A pair of these birds have bred regularly for years in the hedge enclosing the garden of one of the Dápoli houses. The eggs are reddish white blotched all over with light red and inky grey.

Rallinæ.

Sub-Fam.—**RALLINÆ.**—The Pigmy Rail or Baillon's Crake, *Zapornis pygmæa* (*Nuttall*), or Porzana Bailloni (*Vicill. Jerd.* 910), seems common throughout the district. It is found by the edges of reedy ponds in mangrove swamps and flooded rice fields. One or two are usually flushed in a day's snipe shooting.

The Ruddy Rail, *Rallina fusca*, (*Lin. Jerd.* 911), has been seen in a mangrove swamp on one of the small tidal creeks in the Dápoli sub-division, but so far as the writer knows not elsewhere in the district.

The Bluebreasted Rail, *Hypocœnidia striata*, (*Lin. Jerd.* 913), has been found in a mangrove swamp in the Váshishtí river, and no doubt occurs elsewhere in the district.

Tribe—CULTIROSTRES.**Ciconiæ.**

Fam.—**CICONIDÆ.**—The Whitenecked Stork, *kandesar* or *kuner*, *Dissura episcopa*, (*Bodd. Jerd.* 920), is not uncommon in many parts of the district. It is sometimes seen by the banks of the rivers and sometimes inland far from water. It is more rare in the neighbourhood of the coast than inland. No other stork has yet been observed in the district, though it is possible that the White Stork, *Ciconia alba*, (*Bechst. Jerd.* 919), which Major Lloyd mentions as having been once seen by him in the Mahád sub-division of Kolába, sometimes visits the Ratnágiri district. The Black Stork, *Ciconia nigra*, (*Lin. Jerd.* 918), has been observed by the writer on the Nira in Sátára, but never on any of the Ratnágiri rivers.

Ardeidæ.

Fam.—**ARDEIDÆ.** The Common or Blue Heron, *Ardea cinerea*, (*Lin. Jerd.* 923), is plentiful during the cold season on the Sávitri, Váshishtí, and other large tidal rivers. It feeds on the mud banks and in mangrove swamps, as a rule, unlike the next species, with no attempt at concealment. The native name for this and the purple heron is *dok*.

The Purple Heron, *Ardea purpurea*, (*Lin. Jerd.* 924), is also found during the cold months, but is either not so plentiful or not so often seen as the common heron. It keeps more to the thick cover of the high reeds and thorny bushes, which grow luxuriantly in the swamps that fringe the course of the tidal rivers.

The Smaller White Heron or Egret, *Herodias torra*, (*Buch. Hum. Jerd.* 925), as distinguished from the white heron of Europe, *Ardea alba*, (*Lin.*), is abundant on all the large rivers of the district from October to the end of May. Shortly after their bills have turned from yellow to black, and they have

assumed their splendid dorsal trains, they disappear to breed. A few of these birds may possibly remain in the district to breed, but no breeding haunts have ever been discovered by the writer. Like most of their tribe, these egrets, lonely during the daytime, towards sunset gather in vast numbers to wend their way to clumps of mangrove trees, which form common roosting places for them, as well as for countless cormorants, crows, ibis, and snake birds. The native name for all the white egrets, large and small, is *bali*.

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Birds.
Ardeidee.

The Little Egret, *Herodias garzetta*, (*Lin. Jerd.* 927), is still more plentiful than the last throughout the cold and hot weather, disappears at the first burst of the rainy season. Its habits are in every way similar to those of the last, but while its larger congener affects only broad tidal rivers and their swamps, lagoons, and mud banks, the familiar little egret strays further inland, and during the daytime is found by every rustic stream and water-course. The bill is black all the year round, and in its breeding plumage in addition to the dorsal train, which it wears in common with all other herons and egrets, it has a crest of two elongated white feathers and marked breast plumes, both of which are wanting in the preceding species. The train also lasts longer than in other members of the family. It is not unusual to find the last year's train preserved in a more or less ragged state up to March, when not a vestige of this ornament remains on the person of *Herodias torra*.

The Ashy Egret, *Demicregretta gularis*, (*Dosc. Jerd.* 928), is found sparingly on the large creeks during the fair season, and usually in company with the white egrets, whom it resembles in its habits, being lonely by day and gregarious by night.

The Cattle Egret, *Bubuleus coromandus*, (*Bodd. Jerd.* 929), though less plentiful than the little egret, is spread throughout the district. It roosts in company with the other members of its family, but keeps in flocks during the daytime and is never alone. Its habits of following cattle wherever grazing is well known, but like other egrets it feeds also on fish and tadpoles. Rice fields are its favourite feeding grounds, and it is this species and not, as stated by Jerdon, the Pond Heron, *Ardeola grayii*, (*Jerd.* 930), that in Western India is usually called the Paddy Bird. The cattle egret is during the greater part of the year white all over. In May the head, neck, and breast are bright orange buff, and a dorsal train of the same hue is developed. During the rainy season this bird disappears from the district presumably to breed elsewhere. If wounded or caught alive it is very easily tamed and is an amusing pet, being especially active, after lamps are lighted, in gobbling up the innumerable insects attracted by the lights. These birds would appear to have a horror of thunder and lightning; for one evening, at Harnai, during a very severe storm, a terrified egret took refuge in one of the bath-rooms of the house in which the writer was staying. On being discovered and politely shown the door, it evinced a decided objection to again braving the elements, and although it had suffered no injury, was with difficulty expelled on the following morning, long after the storm had ceased.

The Indian Pond Heron, *bagla* or *koka*, *Ardeola grayii*, (*Sykes. Jerd.* 930), is very abundant throughout the district in swamps and rice

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Birds.

Ardeidae.

fields, ponds and rivers. Its habits are too well known to need description. It dons its full breeding plumage, long white crest and dark maroon train about the end of May, and is almost completely transformed by the process. It probably breeds in the district.

The Little Green Bittern, *Butorides javanica*, (*Horsf. Jerl.* 931), found throughout the district on all the creeks and rivers, is especially plentiful in the mangrove swamps of the Sávitri. It is a permanent resident and breeds in April and May. The nests are small flat stick platforms placed in trees or bushes overhanging water, and are well hid from view. The eggs are of a pure pale sea green, or *eau de Nil* colour. This species is chiefly nocturnal in its habits, seldom coming out of its thick cover before sunset. The natives call this bird the *khájan kumbda*, or swamp hen.

A single specimen of the Chestnut Bittern, *Ardetta cinnamomea*, (*Gmel. Jerl.* 933), was, when beating for snipe, procured by the writer in a reedy swamp in the Dapoli sub-division. It is very skulking in its habits, and is flushed with difficulty from the dense cover it affects. Probably it occurs sparingly in suitable localities.

The Night Heron, *Nycticorax griseus*, (*Lin. Jerl.* 937), has been obtained at Dhámápur in the Málwan sub-division. It probably occurs elsewhere in the district, but is rare, and owing to its nocturnal habits, is difficult to find.

Tantalidae.

Fam.—TANTALIDÆ. *Sub-Fam.*—PLATALFINÆ.—The Spoonbill, *Platalea leucorodia*, (*L. Jerl.* 939), very rarely visits the district. One or two stragglers have been shot on the Váshishti river.

Ibisine.

Sub-Fam.—IBISINÆ.—The White Ibis, *Ibis melanocephala*, (*Lath. Jerl.* 941), is found in small parties during the cold season, feeding on the mud banks of the large tidal rivers. It is gregarious by day and roosts by night with the herons, egrets, and cormorants of the neighbourhood. No other species of ibis has yet been found in the district. The Black or Wartyheaded Ibis, *Inocotis papillosus*, (*Tem. Jerl.* 942), which is included in the general Konkan list, and is so common about the Deccan villages, does not appear to visit this district. This species, as well as the curlew and whimbrel, is called *kuri* by the natives.

Order—NATATORES.

NATATORES.

NATATORES.—The first great tribe of this order, the Lamellirostres, comprising flamingos, geese, and duck, is somewhat poorly represented both in species and individuals. Of true geese there are none. The spurwinged blackbacked goose, common in other parts of the Presidency, does not visit the district. The ruddy shieldrake or Bráhmání duck is also an absentee, and the sole members of the family of Anseridæ are the whistling teal and the little goslet or cotton teal, and both of them are uncommon. Flamingos are found but rarely. Six species of true ducks and two of diving ducks or pochards have been recorded; but of these, only two, the wigeon and the common teal, are at all plentiful. Of the Mergidæ or Mergansers no representatives occur. The tidal rivers fringed throughout their course with belts of mangroves, which conceal from view countless little inlets and secluded backwaters,

are well suited for duck grounds, and might be expected to attract vast numbers of wild duck. In such localities with the help of a canoe, and by stalking or driving according to the nature of the ground, good shooting may in some years be had. In other years so few ducks visit the district, and these are so scattered in out-of-the-way places, that their pursuit does not repay the trouble. Few ducks are found at any great distance from the coast. Here and there an old disused pond attracts a small party of gadwalls, teals, or pochards, but the banks of the rivers in their freshwater section are so frequented by men and cattle that they afford no sufficient shelter. Of the Mergitores, the little grebe or dabchick is the sole representative. The next tribe, the Vagatores, contributes four kinds of gulls and five of terns; the other family of this tribe, the Procellariidæ, consisting of albatrosses and petrels, being unrepresented. Lastly, the large tribe of Piscatores has but two representatives, the little cormorant and the snake bird.

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Tribe—**LAMELLIROSTRES.**

Fam.—**PHENICOPTERIDÆ.**—The Flamingo, *Phenicopterus antiquorum* (Pallas, *Jerd.* 944), in small numbers visits the large tidal backwater to the north of Ratnágiri fort during the cold weather, and specimens have been obtained by Dr. Armstrong. They have not been observed elsewhere in the district.

Phenicopteridæ.

Fam.—**ANSERIDÆ.** *Sub-Fam.*—**NETTAPODINÆ.**—The Whitebodied Goose Teal or Cotton Teal, *Nettapus coromandelianus*, (*Gmel. Jerd.* 951), is found here and there during the cold weather in suitable places, but is comparatively scarce. It is often alone and does not appear to be a permanent resident.

Anseridæ.

Sub-Fam.—**TADORNINÆ.**—The Whistling Teal, *Dendrocygna javanica*, (*Horsf. Jerd.* 952), is very rare in the district. The writer once in February came upon a flock of whistling teal feeding in a flooded rice field on the banks of the Váshishti river, and knows of no other instance of their occurrence in the district. The ducks in question were exceedingly thin and proved execrable eating.

Tadorninæ.

Fam.—**ANATIDÆ.** *Sub-Fam.*—**ANATINÆ.** The Shoveller, *Spatula clypeata*, (*Lin. Jerd.* 957), is also a rare species in this district. In five seasons the writer has only seen one flock. This was found on a small river in the Dápoli sub-division far inland.

Anatidæ.

The Gadwall, *Chaulelasmus streperus*, (*Lin. Jerd.* 961), is found in small parties here and there throughout the district during the cold weather, in reedy ponds and in the larger rivers, but is by no means abundant. It is excellent eating.

The Pintail Duck, *Dafla acuta*, (*Lin. Jerd.* 962), is almost as uncommon as the shoveller. A few are occasionally shot in the large duck ground at the meeting of the Váshishti and Jagbudi.

The Wigeon, *Mareca penelope*, (*Lin. Jerd.* 963), is the only species of duck at all abundant in the district; but it is very locally distributed. Every year very large flocks of five hundred or more visit the lagoons on the Váshishti river and afford good sport. They are late in coming, but fatten very rapidly, and are excellent birds for the table. They feed by day in the swamps and lagoons, and generally about sunset gather on the open water.

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Passing up or down the river in a boat on a moonlight night, their low soft whistle may be heard in all directions.

The Common Teal, *Querquedula crecca*, (*Lin. J. ed.* 964), comes early in the cold weather in small flocks, and though nowhere very plentiful, is widely distributed throughout the district, frequenting alike open rivers, reedy ponds, and flooded rice fields.

The Bluwinged or Garganey Teal, *Querquedula ciria*, (*Lin. J. ed.* 965), is more rare, and, preferring lonely ponds, is not often seen on the larger rivers.

Fuligular.

Sub-Fam.—FULIGULINE.—The White-eyed Duck, *Fuligula nyroca*, (*Gould. J. ed.* 969), differing from the true ducks by its short neck and more massive head, has been only once obtained by the writer in a large weedy pond in the Khed sub-division, and is a rare bird in the district. The Golden-eye or Tufted Duck, *Fuligula cristata*, (*L. J. ed.* 971), has also been found at Chiplun. The general Konkani list includes the Redheaded Pochard, *Fuligula ferina*, (*Lin. J. ed.* 968), a species which has not yet been recorded from Ratnágiri. The local vernacular name for all the species of Anatide is *adla*. The name *bodak* is also occasionally applied, but chiefly by Musalmáns.

Tribe—MERGITORES.*Podicipit.*

Fam.—PODIPITIDE.—The Little Grebe or Dabchick, *Podiceps minor*, (*Lin. J. ed.* 975), is found throughout the district in pools and reservoirs, wherever there are rushes and floating aquatic weeds to afford cover. It is probably a cold weather visitant only. The native name for this, and indeed all other diving birds is *páa bád*.

Tribe—VAGATOIRES.*Larus*

Fam.—LARIDÆ. *Sub-Fam.*—LARINÆ.—The Slaty Herring Gull, *Larus affinis*, (*J. ed.* 978, *fr*) has been obtained at Ratnágiri by Dr. Armstrong of the Marine Survey, and probably occurs at other places on the coast.

The Great Blackheaded Gull, *Larus ichthyæctus*, (*Pallus. J. ed.* 979), has been found on the coast at Guhágar in Chiplun. Several were seen at the same time.

The Brownheaded Gull, *Larus brunneicephalus*, (*J. ed.* 980), is abundant throughout the cold season on the coast and main tidal estuaries, and for some miles up the larger rivers. It associates in large flocks, and numbers may always be seen perched on the fishing stakes in the Sávrí river, where it is especially plentiful. In winter the brown plumage of the head and neck is replaced almost entirely by white.

The Laughing Gull, *Larus ridibundus*, (*Lin. J. ed.* 981), has been obtained by Dr. Armstrong at Ratnágiri, but appears to be much rarer than the preceding species. The vernacular name for all the gulls is *káa*.

Sternina

Sub-Fam.—STERNINÆ.—The Gullbilled Tern, *Sterna anglica* (*Mont. J. ed.* 983), is found, for the greater part of the year, on all the tidal rivers, both near the coast and far inland, either alone or in small parties.

The Whitechecked Tern *Sterna albigena*, (*Licht. J. ed.* 986), arrives

on the Ratnágiri coast in considerable numbers towards the end of September. One year towards the close of the south-west monsoon, after very stormy weather, numbers of this or a similar species alighted, utterly exhausted on the sea shore at Harnai or Suvarndurg. Hundreds were caught by the fishermen and hawked about for food. Numbers of their skeletons may still be seen on the sea shore high and dry above the tide level, and in the old island fort of Suvarndurg. The sea eagles, who frequent this spot, also seem to have taken advantage of the helpless state of these terns, and to have shared in the general feast; for several skeletons were found both in and immediately below their gigantic nest.

The Little Tern, *Sterna saundersi*, (*Hume, Journ.* 1885), also visits the coast and tidal rivers in the cold weather, arriving with the last species in September.

The Large Sea Tern, *Sterna bergii*, (*Licht. Journ.* 1889), has been obtained at Vijaydurg on the coast.

The Smaller Sea Tern, *Sterna media*, (*Hersf. Journ.* 1900), has been obtained by Dr. Armstrong at Ratnágiri. The General Konkan list includes the Small Marsh Tern, *Hydrochelidon hybrida*, (*Pall. Journ.* 1844), which also in all probability occurs in this district, though no specimen has been obtained. The vernacular word for terns is *kire*, the same as for gull.

Tribe—PISCATORES.

Fam.—GRACULIDÆ. *Sub-Fam.*—GRACULINÆ.—The Little Cormorant or Shag, *Phalacrocorax pygmaeus*, (*Pall. Journ.* 1007), is exceedingly common throughout the district on all the large rivers, and especially so on the Váshisti. It appears on the approach of the rainy season to leave the district, and go elsewhere to breed. By day it is sometimes alone and sometimes in small parties. These industrious fishers travel many miles up the rivers in search of choice hunting grounds, returning to a common roost at night. Standing on the banks of any of the large rivers about sundown, one may see thousands wending their way to their chosen roost, skimming over the surface of the water in a continuous succession of small parties. They are called by the natives *pín lúla*, water crows. The Large Cormorant, *Phalacrocorax carbo* (*Linn. Journ.* 1005), included in the general Konkan list, is, if it occurs at all, very rare in this district. Probably it does not extend so far south.

Sub-Fam.—PLOTINÆ.—The Indian Snake Bird or Anhinga, *Pín huda*, *Plotus melanogaster*, (*Gmel. Journ.* 1008), is also very plentiful throughout the district, frequenting alike large and small rivers. It is probably a permanent resident, but its nests have not been discovered. Like the heron and cormorant, it is usually solitary by day and gregarious at night.

SECTION VII.—FISH.

The district is well supplied with salt water, and in a less degree with freshwater, fish. In the rivers, particularly in the Jog near Dápoli, and far up the tidal creeks and inlets, freshwater fishing is carried on. In June, July, and August, when the fishermen do not venture to sea, they fish in canoes in the rivers and creeks.

Chapter II. Production.

Birds.
Sterninæ.

Graculidæ.

Plotinæ.

Fish.

Chapter II.
Production.
Fish.

Ratnágiri rivers are too short, too small in volume, and too brackish to have any great variety or store of freshwater fish. Still, as almost the whole of the large population are fish-eaters, fish is much sought after, the rivers all the year round but especially in June, July, and August, being from their sources constantly swept by close nets. Besides netting, by damming streams, blinding, and stupefying the fish with *kura*¹ juice, or setting at a hole in the dam a basket trap or small-meshed bag-like net, large numbers are caught.

Sea-fishing goes on all along the coast, but chiefly off the mouths of creeks and rivers a few miles from the shore. Except during the stormy months of the south-west monsoon fishers are busy all the year round, their chief takes being in October and November at the close of the rains when *surma*, *kurti*, *moa*, *kokar*, *karel*, *jambosa*, *lútar*, *valrás*, *valshingti*, *káne*, *gobra*, *kánta*, *buklul*, *karli*, *dandotar*, *gubir*, *báta*, *bombil*, *birja*, *jóki*, *patoldi*, *baskal*, *chandgo*, *sátáro*, *shéran* and others are caught and salted in great quantities. Later on fish are much less plentiful but salting and curing continue on a smaller scale till the break of the rains. The fish are caught both in nets and with long lines, but chiefly in nets. The local names of the commonest kinds of sea fish besides the above are *mushi*, *vághli*, *ghol*, *dúgol*, large *jira* or *isrál*, *sarma*, *karli*, *shingála*, *rúvas*, *gedar*, *pulo*, *bing*, *sarge*, *palu*, *kotca*, *shingti*, *dori*, *báta*, large *boi*, *renvi*, *kánat*, small *jhárti*, *cherbot*, *moa*, *karikaro*, *mechni*, *lep*, *siru*, *bangda*, *shitak*, *murda*, *kára*, *javás*, *kári*, *mech*, *kárti*, *golim*, *kánchek*, *kaja*, *bokera*, *máji*, *dori*, *kumbáru*, and *chingal*. Those chiefly fished for by long lines are besides some of the above, the *reoni*, *karkara*, *shitak*, *shingti*, *dori*, *jambora*, *gobra*, *palu*, *karel*, *jira*, *dúgol*, *moa*, *ghol*, *shingála*, *kokar*, *gobra*, *kondecha*, *maru*, and *mushi* of several kinds. The *boi*, *lep*, *mech*, and *vághli* are also caught by spearing. *Hed*, when dried called *kuti*, is used for manure. Accidents and deaths sometimes occur from the bite of the shark, *konde*, or the sea snake, *malida*. In October, November, and December, whales are sometimes seen along the coast, but are not molested, and porpoise, *gúdu*, are at times caught in the nets. Besides curing and salting, the fishermen of all classes do a brisk trade during the fair season, from November to June, in collecting and drying the fins and maws of different kinds of fish. The trade is in the hands of a few Khojás, who buy from the fishermen and send the goods to the Bombay market, whence they are eventually exported to China for isinglass or gelatine. The fins are obtained from the *mushi* or *konde*, a species of shark, and from two kinds of saw-fish *geni* and *náli*, while the maws or sounds are got from the *ghol* and the *shingti*. The dorsal, pectoral, and caudal fins are cut off, the anal and ventral fins alone being rejected. Thus each shark yields four fins, one dorsal, two pectoral and one caudal, while the saw-fish yields three only, two dorsal and one caudal. The fins and maws are merely dried in the sun, and sprinkled with lime, *chunam*, or wood ashes to assist the process and prevent, it is said, attacks of insects. The *geni* attains a length of from 15 to 20 feet and more,

¹ Milk hedge or Indian Tree Spurge. *Euphorbia tirucalli* (Linn.)

of which the saw is about one-third. The *nali* is considerably smaller. Both these fish are caught in the *dilvar* net moored to heavy anchors in from fifteen to fifty fathoms water. On the net being hauled up, should a saw-fish be caught, a noose is dexterously thrown over the saw and pulled tight. The fish is then carefully drawn up to the side of the boat, and the head severed from the body at the neck with a large knife. If the fish is too large to be hauled on board, it is cut into two or more pieces. Should the take have been made close to shore, the fish is towed to shore and despatched there. In handling the saw-fish great care is taken by the fishermen to stand well in front of the fish to avoid a lateral blow from the formidable weapon with which it is armed. Accidents are consequently rare. Harpoons are never used by the Ratnágiri fishermen. In addition to their fins saw-fish yield a large quantity of oil. A large *geni* produces, it is said, from five to ten *mans*, twenty to forty gallons. Oil is also extracted from shark's livers, which after cleaning are placed in cauldrons, and slowly heated. The fish oil is used locally for preserving the timbers of native craft, and is not exported. Oysters, *kálar*, are found on the rocks at Harni, Redi, Ratnágiri, Jaitápur, Vijaydurg, and other places on the coast, those from Jaitápur being considered the best. No attempt has been made to farm or preserve oysters in artificial beds. Cockles and other bivalves, *mula*, are abundant. Besides forming a staple article of food to the poorer classes they supply the whole district with lime for building purposes. Large quantities of shells are calcined for this purpose at Juva on the Ratnágiri river, where the manufacture is of long standing. Two or more species of cuttle fish, *mákul*, are found on the coast, but it is said not in sufficient numbers to make the collection of the bone remunerative. Turtles are occasionally caught, and fetch from 2s. to 3s. (Rs. 1-1½). The whale, *dévmása* or godfish is, as before mentioned, never pursued. The fishermen are aware of their commercial value, but think it unlucky to kill them. They also believe that if bad language is used to a whale, it will inevitably charge and upset the boat containing the offender. So the fishman gives the whale as wide a berth as he can. Porpoises are not intentionally caught, and, if netted by accident, are usually released. As they are plentiful, a trade in porpoise hides would probably be very remunerative.

Though freshwater fishing is carried on by almost all of the lower classes, Bhois are perhaps the only caste with whom fishing is the chief business of life. Of sea-fishers some are Musalmáns and others Hindus. The Musalmáns, Sunnis known as Dáldis, claim an Arab descent. This their look supports, and there seems no reason to doubt that they have a strain of Arab blood though from intermarriage with the women of the country their home tongue is now Maráthi. The Hindu sea-fishers are, in the north as far as the Dábhól river, Kolis, then Gábits, Bhois, Kutis, and Sonkutis, and in the south near Málván, Vengurla, and Redi, Kárvis or Goa native Christians. The language of all these fishermen does not, except for seafaring terms and slight peculiarities of accent and pronunciation, differ much from that of the cultivators and other low

Chapter II. Production.

Fish.

Fishermen.

Chapter II. Production.

Fish.

classes. Their houses, except in a few cases, are thatched with grass. Their dress, like that of low caste Hindus, consists of a waistband, *langoti*, a waistcloth, *dhotar*, a jacket, *bandi*, and a cap, *rumál*. They own the fishing boats and themselves prepare the ropes and sails. In fishing they never go far from the coast. But some who own good boats engage in the coasting trade. Their busiest time is in the months of November and December when the deep-sea fishing begins.

Stakes.

The depth and rockiness of the coast prevent the use of stake-nets. Their place is supplied by two pairs of *pángara*¹ wood buoys moored by coir ropes to anchors, *pirga*. They are set in about fifty fathoms water far offshore, but not out of sight of the Sahyádrí hills. In the rivers and creeks stakes are used, driven into the river beds by fastening to each of them two boats on opposite sides at high water; as the water ebbs the weight of the two boats and their crews bear downward perpendicularly on the pointed end of the stakes which sink deep into the mud or sand. The stakes are generally taken away during the rainy months.

Boats.

Small boats, *marhrás*, of from 4 to 9½ tons (11-26 *khandis*) burden and with one or two masts are used for deep-sea fishing; though a smaller class of boat, an outrigger canoe, called *alandi*,² sometimes stays out for a day or two. These and the river canoes, *dons*, are made by local carpenters. The favourite wood is for fishing boats light *dhup* wood and for canoes mango or *vudi*.³ All masts and yards, *parbán*, are of teak from the Malabár coast. The fishermen do their own repairs. As a rule profits are equally divided among the crew. But whenever there is a good take the owner of the boat claims a larger share. The fishermen make ready their own ropes, sails, and nets. Nets are made of coir, hemp *tag*, or *kecan*⁴ tree fibre. The stems of the hemp plant steeped in water for eight or nine days, are dried, beaten with a stick, and separated. For sails the produce of the Bombay mills has taken the place of Deccan made cloth.

Nets.

The nets vary in length from 10 to 200 feet and from 5 to 30 feet in breadth. The meshes are from 1 of an inch to 1½ inches wide. The nets are generally made ready in the rainy season, the fishermen's easy time. The names of the nets are *dilear*, *cághat*, *máud*, *ghan*, *vári*, *páta*, *pálapáta*, *kárapáta* or *shingáipáta*, *kánpál*, *hag*, *dorpáta*, *ghanpáta*, *bangáipáta*, *káukanipáta*, *donbortipáta*, *kárpáta*, *ghalam ind*, *tharlipáta*, *káuchek páta*, *ant*, *kárpáta*, and *dandi ind*. Before using them nets are boiled in water mixed with cement and finely burnt and powdered shells, and stretched between two poles or trees to dry. When dry they are dyed by being several times smeared with a wash of *ain*⁵ bark. A net generally lasts for a year.

¹ *Erythrina indica*.

² The *alandi* is called from the piece of wood that, floating at some distance from the windward side of the boat and at its ends fastened to the boat by two spar-keeps, the canoe from up-etting.

³ *Cedrephyllum mophyllum*.

⁴ *Terminalia tomentosa*.

⁵ *Helicteres ixora*.

Long lines are seldom used. They vary in length from 35 to 40 fathoms and the hooks are baited with *mula* or *chingul*.

Torch-light is used only to catch crabs, which are also caught by the hand or by the small net called *húth ind*.

The fishermen often stay for several days at sea, but the usual custom is to start in the afternoon about four and to return next morning about ten. Women and old men carry the fish to the market, or hawk them from door to door. A system of bartering is common, fish being exchanged for grain or firewood. Some of the better class of fishermen make large purchases for curing and salting.

The curing is simple. The fish is cut open, cleaned, washed in salt water, rubbed with salt, and laid on a bamboo stand and covered over with matting to drain for three days, fresh salt being applied daily. The large and small varieties of *surme* and *karli* are the fish best suited for curing. Small fish are simply dried in the sun, being neither salted nor cleaned.

Chapter II.

Production.

Fish.

Markets.

Curing.

CHAPTER III.

POPULATION.

Chapter III.
Population.
 Introductory.

RATNA'GIRI is remarkable for the number of its people, their freedom from crime, and their readiness to leave their homes for military and other service.

Of its early population, in the absence of any separate hill tribes, almost no distinct traces remain.¹ Among the present people the early element is probably strongest in the Mhárs and coast Kolis, less marked in the Bhandáris, and weaker in the Kunbis and Maráthás. The later arrivals, with some of whom almost every class of the present people is more or less closely connected, came both from above the Sahyádrí hills and from beyond the sea. According to the legendary account of the first Bráhmañ peopling of the district Parashurám entered it from the Deccan. The early Deccan and Karnátañ rulers, with their own district officers, introduced Deccan settlers; in the sixteenth century the Bijápur kings and their village renters, *khots*, brought fresh bands of colonists; and in the seventeenth century Shiváji's uplanders garrisoned many of its new forts. Neither under Peshwa nor British rule has there been any movement from the east into Ratnáñiri.

From the earliest times their fame as sea robbers no doubt tempted foreign adventurers, Rajputs from the north, Arabs and Africans from the west, and men of the Malabár coast from the south, to join the settlements of the Ratnáñiri pirates. To this mixture of foreign blood is probably due the vigour, and till lately the love of war and plunder, that marked its coast tribes, Bhandáris, Gábíts, Khárvis, and Kolis. The legendary history of the Javals and Chitpávans seems to show that these classes entered Ratnáñiri by sea. Later on (about 699), driven by cruel persecutions, numbers of families fled from Kufa and Basra, and, sailing from the Persian Gulf, settled along the west coast of India. The descendants of these settlers, now known as Konkani Musalmáñs, and found chiefly on the shores of the navigable Ratnáñiri rivers, in spite of intermarriage with the people of the country, keep much of the fairness and special features of the original settlers. In more modern times (1347-1660) under the Báñmani and Bijápur kings, the attractions of trade and of military service drew numbers of Arabs and Persians, and to a less degree of Gujarát Hindus and Musalmáñs to the Ratnáñiri centres of traffic and power. In the eighteenth century the disordered state of their native country drove many

¹ The only traces are a few wandering Káthkaris in the north and some begging Thákurs in the south.

Gujarát traders to the Konkan, and during the last sixty years the Bhátíás, moving south from Cutch and Bombay, have drawn to themselves much of the trade and wealth of the district.

Under the British two great changes have passed over the district; the 'Pirate Coast' has become more orderly and freer from crime than any part of the Presidency, and the number of its people has more than doubled. Since piracy has been put down, the only trace of the old warlike spirit is in the large body of recruits the district still supplies to the Bombay army. According to the returns there were, in 1879, 5579 men in military service receiving about £58,000 (Rs. 5,80,000), and 7009 pensioners in receipt of £45,452 (Rs. 4,54,520) a year.¹

During the last sixty years, for so poor and crowded a country, the population of Ratnágiri has amazingly increased. Very soon after the British conquest (1820), the district was surprisingly tilled and full of people. So great were their numbers that the bulk of the husbandmen were at the mercy of the middlemen and upper classes. The 1820 census returns showed, during the rainy season, a total population of 462,651 souls.² Ratnágiri was at that time a grain exporting country, and in the fair season when traders thronged its ports, the population was considerably more. Twenty-five years later, though this number is said to have been far from complete, the returns showed a total of 625,782 souls or an increase of 163,132 or 35·2 per cent. Five years later (1851) the district is described as much overcrowded; tillage had spread to the very hill tops, every available spot was worked by the plough or the hoe; exports of grain had ceased; the district paid its way from the savings of those who had taken service in the army or police, or who went for work to the districts round; many of the people suffered from want of food. In spite of this over-

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¹ The details are :

Ratnágiri Soldiers and Pensioners, 1879.

CASTE AND RACE	SUBHE- DA RS.		JAMA'- DA RS.		HAVA'L- DA RS.		NA'IKS.		PRIVATES.		DRUMMERS.		TOTAL	
	In service.	Pensioners.	In service.	Pensioners.	In service.	Pensioners.	In service.	Pensioners.	In service.	Pensioners.	In service.	Pensioners.	In service.	Pensioners.
Bráhmans	1	2	..	2	4	4	3	5	16	23	..	..	24	38
Vánis	1	4	1	2	7	6	2	10	61	94	..	..	72	116
Kunbis	1	15	3	9	12	100	12	113	366	534	..	..	394	773
Maráthás	29	66	41	44	163	391	210	473	2951	3063	6	9	3400	4045
Mochis	..	6	..	2	17	9	27	16	211	88	17	2	272	122
Mhárs	4	12	4	10	32	67	41	100	884	938	65	25	1030	1150
Other Hindus	3	17	3	5	10	51	5	71	124	445	2	2	147	594
Christians	1	6	..	..	2	12	1	13	51	23	5	5	60	61
Musalmańs	2	7	1	5	14	15	11	16	171	65	1	4	200	112
Total	42	134	53	79	261	655	312	519	4835	5273	96	49	5599	7009

² The total returns, 640,857 souls, included, besides Ratnágiri, four-fifths of Kolába. The number given in the text has been calculated by taking from the total returns the proportion which in 1872 four-fifths of Kolába bore to Ratnágiri.

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 Introductory.

crowding, since 1851 the population has greatly increased. In 1872 it was returned at 1,019,136 souls, and since then, as it passed easily through the famine years, the number has probably steadily and considerably risen. Though some fresh land has been brought under tillage, the demand for food has outrun the supply, and, in ordinary years, grain is brought into the district both by land and sea. No new local industry has been started. But, by land, better and safer roads, and, by sea, the sure and rapid passage of steamers, have made it easy for the people to leave their homes in search of work. Wages have risen more than the cost of living, and the district is enriched by the large stores of money brought to it by the crowds of its officials and clerks, its soldiers and constables, its factory hands, and its carriers spread over the Presidency making and saving money. Though their great numbers keep the bulk of the people very poor, the teeming population of Ratnágiri has been one of the chief factors in the development of the city of Bombay. Connected with it by a short and easy land journey and by a safe and cheap sea voyage, Ratnágiri is, much more than the districts round Bombay, the supplier of its labour market. It is estimated that in addition to many thousands partly settled in Bombay, over one hundred thousand workers pass every fair season from Ratnágiri to Bombay, returning at the beginning of the rains to till their fields. To Ratnágiri's clever pushing upper classes, to its frugal teachable middle classes, and to its sober sturdy and orderly lower classes, Bombay owes many of its ablest officials and lawyers, its earliest and cleverest factory workers, its most useful soldiers and constables, and its cheapest and most trusty supply of unskilled labour.

Census.
 1820.

Since the beginning of British rule the people of Ratnágiri have thrice been numbered, in 1820, in 1846, and in 1872. In 1820, with no opposition on the part of the people and probably with less than five per cent of error,¹ the census, including besides the present Ratnágiri four-fifths of Kolába, showed a total population of 640,857 souls living in 131,428 houses. Of the whole people 334,191 were males and 306,666 females; children under twelve numbered 211,717, of whom 131,933 were boys and 79,784 girls. For the thirteen sub-divisions included in the 1820 census, the 1872 returns showed a total of 1,302,594 souls or an increase of 103·25 per cent.

1846.

According to the 1846 census, which would seem to have been far from complete,² the total population of the district was 625,782 souls, or 165·15 to the square mile. Hindus numbered 577,984 or 92·36 per cent, and Musalmáns 45,822 or 7·32 per cent; that is at the rate of twelve Hindus to one Musalmán. There were, besides, 1856 Christians, 83 Jews, and 37 Pársis. The 1872 census, to some extent because the numbering was more correct than in 1846, showed a startling increase of 62·85 per cent in population, the total returns amounting to 1,019,136 souls or 268·97 to the square mile. Of the whole number, 941,049 or 92·33 per cent were Hindus, 74,834 or 7·34 per cent Musalmáns, 3244 Christians, and 9 Pársis.

1872.

¹ Collector in Gov. Rev. Rec. 16 of 1821, 336-338.
² Collector 71, 9th January 1880.

The following statement shows that in the twenty-six years ending 1872, population advanced 62·85 per cent, and houses increased 92·44 per cent.

Ratnágiri Population, 1846 and 1872.

YEAR.	POPULATION.					
	Hindus.	Musalmán's.	Christians	Others.	Total	Houses
1846	577,984	45,822	1856	120	625,782	116,807
1872	941,049	74,834	3244	...	1,019,136	224,790
Increase per cent	62·81	63·31	74·78	...	62·85	92·44

The following tabular statement gives, for the year 1872, details of the population of each sub-division of the district according to religion, age, and sex :

Ratnágiri Population, 1872. Sub-divisional Details.¹

SUB-DIVISION.	HINDUS.								
	Up to 12 years.		From 12 to 30		Above 30 years		Total.		Grand Total
	Males.	Females.	Males.	Females.	Males.	Females.	Males.	Females.	
Dápoli	24,501	22,279	17,187	20,598	19,381	20,524	61,069	63,311	124,380
Guhágar	14,646	13,829	9923	12,861	9949	11,073	34,518	37,763	72,281
Chiplun	33,619	31,166	23,506	29,579	21,863	23,381	79,188	84,126	163,314
Sangameshvar	17,662	16,277	12,145	15,220	11,640	13,174	41,447	44,671	86,118
Ratnágiri	20,971	19,234	14,951	13,729	14,592	15,212	50,514	53,175	103,689
Rájápur	31,040	30,115	21,231	26,468	22,745	25,146	75,066	81,729	156,795
Devgad	22,079	21,537	17,058	20,180	15,939	18,099	55,076	59,816	114,892
Máivan	22,953	22,070	13,923	21,002	15,925	19,067	56,901	62,739	119,640
Total	187,661	176,507	134,024	165,147	131,034	145,676	453,719	487,330	941,049
SUB-DIVISION.	MUSALMÁN'S.								
	Up to 12 years.		From 12 to 30		Above 30 years		Total.		Grand Total
	Males.	Females.	Males.	Females.	Males.	Females.	Males.	Females.	
Dápoli	3335	2957	2669	3450	2639	3195	8643	9902	18,545
Guhágar	1101	1068	678	928	681	114	2460	2710	5170
Chiplun	3039	2666	1687	2693	1732	1946	6508	7310	13,818
Sangameshvar	1046	1038	530	856	592	733	2218	2627	4845
Ratnágiri	3544	3222	1978	2902	2134	2663	7655	8277	15,933
Rájápur	2616	2475	1513	1965	1599	1448	5728	5883	11,616
Devgad	701	663	423	565	410	379	1539	1627	3166
Máivan	347	313	326	501	285	219	908	833	1741
Total	15,720	14,422	9559	14,755	10,072	10,997	35,660	39,174	74,834
SUB-DIVISION.	CHRISTIANS AND PARSIS.*								
	Up to 12 years.		From 12 to 30		Above 30 years		Total.		Grand Total
	Males.	Females.	Males.	Females.	Males.	Females.	Males.	Females.	
Dápoli	27	41	35	34	37	34	94	109	208
Guhágar	...	...	7	2	5	1	12	3	15
Chiplun	...	...	2	...	...	...	2	...	2
Sangameshvar	2	...	1	...	...	...	3	...	3
Ratnágiri	12	7	42	16	38	4	92	27	119
Rájápur	24	28	27	21	32	14	83	63	146
Devgad	144	139	214	135	132	99	490	373	863
Máivan	396	370	333	334	219	236	948	940	1888
Total	605	535	661	542	463	368	1729	1515	3244

* The separate figures represent the number of Pársis.

¹ Since 1872 transfers of villages from one sub-division to another have been made in all the sub-divisions except Dápoli, and the number of sub-divisions increased from eight to nine.

Chapter III.
Population.
1872.

Distribution.

Chapter III.
Population.

Ratnágiri Population, 1872. Sub-divisional Details—(continued).

1872.

SUB-DIVISION.	TOTAL.								
	Up to 12 years.		From 12 to 30.		Above 30 years.		Total.		Grand Total.
	Males.	Females.	Males.	Females.	Males.	Females.	Males.	Females.	
Dápoli	27,868	25,277	19,893	23,992	22,059	24,053	69,815	73,322	143,137
Guhágar	15,747	14,897	10,803	13,791	10,835	11,788	36,990	40,478	77,468
Chiplun	36,358	33,832	25,193	32,277	23,645	25,327	35,698	41,436	77,134
Sangameshvar	18,710	17,315	12,726	16,078	12,232	13,907	43,668	47,298	90,966
Ratnágiri	24,527	22,463	16,971	21,737	16,764	17,279	58,262	61,479	119,741
Rájápur	33,670	32,618	22,771	28,454	24,377	26,608	80,818	87,680	168,498
Devgad	22,924	22,359	17,700	20,880	16,481	18,577	57,105	61,816	118,921
Málvan	23,696	22,753	18,684	22,237	16,380	19,523	58,760	64,513	123,273
Total.	203,995	191,514	144,548	179,444	142,573	157,062	491,116	528,020	1,019,136

From the above statement it appears that the percentage of males on the total population was 48·18, and of females 51·82. Hindu males numbered 453,719, or 48·22 and Hindu females numbered 487,330, or 51·78 per cent of the total Hindu population; Musalmán males numbered 35,660 or 47·65 per cent, and Musalmán females 39,174 or 52·35 per cent of the total Musalmán population. Christian males numbered 1729 or 53·29 per cent, and Christian females numbered 1515 or 46·71 per cent of the total Christian population. Pársi males numbered 8 or 88·88 per cent, and Pársi females numbered 1 or 11·12 per cent of the total Pársi population.

Health.

The total number of infirm persons was returned at 4467 (males 2766, females 1701), or forty-three per ten thousand of the total population. Of these 608 (males 415, females 193), or six per ten thousand were insane; 196 (males 125, females 71), or two per ten thousand, idiots; 871 (males 508, females 363), or nine per ten thousand, deaf and dumb; 1555 (males 746, females 809), or fifteen per ten thousand, blind; and 1237 (males 972, females 265), or twelve per ten thousand, lepers.

Age.

The following tabular statement gives the number of the members of each religious class of the inhabitants according to sex at different ages, with, at each stage, the percentage on the total population of the same sex and religion. The columns referring to the total population omit religious distinctions, but show the difference of sex:

Ratnágiri Population by Age, 1872.

Age.	HINDUS.				MUSALMANS.			
	Males.	Percent- age on total males.	Females.	Percent- age on total females.	Males.	Percent- age on total males.	Females.	Percent- age on total females.
1 year	19,879	4·33	20,142	4·13	1724	4·83	1716	4·38
1 to 6	85,723	18·89	86,360	17·72	7373	20·67	7243	18·46
6 „ 12	82,259	19·13	70,005	14·36	6842	18·59	5463	13·94
12 „ 20	62,751	13·83	72,470	14·87	4734	12·15	5574	14·12
20 „ 30	71,273	15·70	92,677	19·01	5525	15·49	8221	20·95
30 „ 40	52,357	11·67	59,590	12·22	4706	12·07	4712	12·03
40 „ 50	39,379	8·67	39,950	8·26	2704	7·58	2975	7·59
50 „ 60	24,697	5·44	27,418	5·02	1789	5·01	2016	5·14
Above 60	15,091	3·30	18,712	3·34	1273	3·57	1294	3·30
Total	453,719		487,330		35,660		39,174	

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Ratnagiri Population by Age, 1872—(continued).

AGE.	CHRISTIANS AND PARISIS.				TOTAL.			
	Males.	Percent- age on total males.	Females.	Percent- age on total females.	Males.	Percent- age.	Females	Percent- age
1 year	67	3·87	74	4·98	21,470	4·87	21,932	4·15
1 to 6	274	15·84	290	19·14	93,370	19·01	93,893	17·78
6 „ 12	264	15·26	221	14·59	89,155	18·15	75,689	14·33
12 „ 20	265	15·38	277	18·23	67,352	13·71	78,281	14·82
20 „ 30	1	12·50						
	395	22·84	265	17·49	77,196	15·72	101,163	19·15
	3	37·50						
30 „ 40	213	12·32	160	10·56	57,476	11·70	64,462	12·20
40 „ 50	139	8·01	112	7·39	44,235	8·59	43,044	8·15
	3	37·50						
50 „ 60	77	4·45	1	4·49	26,564	5·40	29,502	5·58
	1	12·50	68					
Above 60	34	1·96	48	3·17	16,303	3·32	20,054	3·79
Total	1729		1515		491,116		523,020	
	8		1					

The Hindu population of the district belongs, according to the 1872 census, to the following sects :

Religion,

Ratnágiri Hindu Sects, 1872.

VAISHNAVS.					LINGA'- YAT.	SHAIVS.	ASCETICS.	UNSECTA- RIAN HINDUS.	SHRA'- VAKS.	TOTAL
Rámá- nuj.	Valla- bháchari.	Kabir- panthi.	Mádhvā- chari.	Svāmi- nārā- yan.						
26	660	1	506	1	6340	931,509	517	12	1477	941,049

From this statement it would seem that, of the total Hindu population, the Shaivs numbered 937,849, or 99·66 per cent ; the Shrāvaks or Jains, 1477, or 0·15 per cent ; the Vaishnavs, 1194, or 0·12 per cent ; and the unsectarian classes 529, or 0·05 per cent. The Musalmán population belonged to two sects, Sunni and Shia ; the Sunnis numbered 74,729 souls, or 99·86 per cent of the total Musalmán population ; and the Shiás 105 souls or 0·14 per cent. The nine Pársis were Shahansháis. In the total of 3244 Christians there were one Baptist, 532 Catholics, and 2711 Protestants including 17 Episcopalians, 28 Presbyterians, and 2666 native Christians.

According to occupation the 1872 returns divide the population into seven classes :

Occupation,

- I.—Employed under Government or local authorities, numbering in all 4491 souls or 0·44 per cent of the entire population.
- II.—Professional persons, 5554 or 0·54 per cent.
- III.—In service or performing personal offices, 9501 or 0·93 per cent.
- IV.—Engaged in agriculture and with animals, 450,760 or 44·23 per cent.
- V.—Engaged in commerce and trade, 18,626 or 1·82 per cent.
- VI.—Employed in mechanical arts, manufactures and engineering operations, and engaged in the sale of articles manufactured or otherwise prepared for consumption, 65,783 or 6·45 per cent.
- VII.—Miscellaneous persons not classed otherwise, (a) wives 102,735 and children 351,516, in all 454,251 or 44·57 per cent; and (b) miscellaneous persons 10,170 or 1·00 per cent, total 464,421 or 45·57 per cent.

Chapter III.

Population.

Dress.

As regards the style of living of the people of Ratnágiri, the dress does not differ from that worn in other Maráthi-speaking districts. In the rainy season men of the richer classes wear a long armless cloak of thick red baize or flannel, somewhat peaked at the top, and drawn over the head like a cowl or hood. Of the poorer classes both men and women wear a thickly-folded blanket drawn over the head and falling to about the waist. Stout umbrellas of oil cloth and cane work, or of palm leaves are also used, and when at work in the fields, husbandmen hang on their heads a peaked and rounded teak or palm leaf shield. Almost all classes prefer sandals to the red Deccan slippers. A peculiar custom in Málvan and Vengurla is that all Hindu and native Christian women who can afford it, constantly wear chaplets or wreaths of red and yellow flowers.¹ With few exceptions all sleep on cots strung with coir rope. Some houses have chairs and stools, but of most the chief furniture are chests, boxes, and brass vessels. Of the brass articles perhaps the most striking is a large lamp and pedestal standing often two feet from the ground. Coarse China bowls are not uncommon.

Food.

The meals are taken at noon and after sunset. Among the well-to-do rice is the staple food. With the rice clarified butter, a curry of buttermilk or onions with a tamarind or *kokam* dressing, and vegetables fried in sweet oil and spiced are taken. Buttermilk, *ták*, is so indispensable that almost every house, except the poorest, keeps a cow or buffalo. On festive days, balls of wheat flour, with molasses and clarified butter, are eaten, and most families have a store of yams. The lower classes eat *náchni* instead of rice, and the poorest *vari* and *harik*, an unwholesome grain unless soaked in hot water, and *urid*, a pulse cheaper than gram or *tur*. Fish, chiefly dried, is used by all Musalmáns and low class Hindus as a daily article of food, and goat mutton and poultry are eaten on festive days. Except the very poorest, the people of Málvan are specially careful not to expose themselves to the sun. Every day before going out Shenvis and all classes, except strict Bráhmans, take a draught of weak rice water, *pej*, and with it a small quantity of fresh cocoanut kernel. The midday meal is then eaten at about 1 p.m. Bráhmans, who cannot break their fast before washing, take their morning meal at a much earlier hour than is usual elsewhere. The object of the early draught of rice water is said to be to guard against the heat of the sun and to keep off attacks of biliousness. In the evening all classes anoint their heads with cocoanut oil, in the belief that it preserves the eyesight and cools the head. All keep early hours. Late dinners and night work are carefully avoided. In the south of the district the fear of biliousness and the heat of the sun seems to guide every action of the people's life.

¹ This custom is said to have been brought from Goa. The flowers used are the *Calysaccion longifolium surang*, the *Amaranthus globosus gend* or *buntáv*, the *Pandanus odoratissimus kevda*, the *Calatropis gigantea mándár*, the *Chrysanthemum indicum shervanti*, and the *Ruellia infundibuliformis aboli*. They are grown in every village, and numbers of flower strings are daily brought to market. *Shervanti*, *kevda*, and *aboli* wreaths wither rapidly in two days at the outside. The others keep their colour and freshness for nearly a month. The *shervanti* and *kevda* are costly and are used only by the rich.

Under Bráhmans come eight divisions with a strength of 66,046 souls (males 32,223, females 33,823) or seven per cent of the total Hindu population. Of these 30,053 (males 14,527, females 15,526) were Chitpávans or Konkanasths; 14,367 (males 7146, females 7221) Karhádas; 777 (males 423, females 354) Deshasths; 5727 (males 2776, females 2951) Devrukhás; 70 (males 46, females 24) Kirvants; 40 (males 28, females 12) Kanojás; 1277 (males 648, females 629) Javals; 13,669 (males 6579, females 7090) Shenvis; and 66 'Other Bráhmans'.

CHITPÁVANS,¹ also known as Konkanasths or the chief Konkan Bráhmans, have a total strength of about 30,000 souls or 45·42 per cent of the Ratnágiri Bráhman population. Parshurám hill, near Chiplun, is the head-quarters of the caste whose original limits are said to be the Sávitri in the north and the Devgad river in the south. They have no sub-divisions, all eating together, and intermarrying.² Of their early history or settlement in Ratnágiri no record remains. The local legend makes them strangers descended from fourteen shipwrecked corpses who were restored to life by Parshurám. In former times, little thought of and known chiefly as messengers or spies, *harkáras*, the success of their patrons, the Marátha chiefs, brought out their keen cleverness, good sense, tact, and power of management, and their caste supplied not only the ruling family, but most of the leading men who during the eighteenth century held together the loose Marátha confederacy. Fair and pale with, in most cases, light eyes,³ they are a well-made, vigorous class, the men handsome with a look of strength and intelligence; the women small, graceful, and refined, but many of them delicate and weak-eyed. In their homes they use a peculiar dialect,⁴ in

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Population.

Bráhmans.

Chitpávans.

¹ According to Molesworth, the Konkanasths were, in allusion to the story of their being sprung from corpses brought to life by Parshurám, nicknamed Chitpávans or pure from the pyre, *chita*. Turning this from a nickname into a title of honour, the Konkanasths say that it means pure of heart, *chitta*.

² The fourteen Konkanasths *gotras* are: *káshyap*, *shándilya*, *vásishtha*, *vishnuvardhan*, *kaundinya*, *nityundán*, *bháradváj*, *gárgya*, *kapi*, *jámdagnya*, *vatsa*, *bábhavya*, *kaushik*, and *atri*. Their sixty ancient surnames are: of the *káshyaps*, Lele, Gánu, Jog, Laváte, Gokhale; of the *shándilyas*, Soman, Gángal, Bháte, Ganpule, Dámle, Joshi, Parchure; of the *vásishthas*, Sáthe, Bodás, Ok, Bápat, Bágul, Dháru, Gogte, Bhábhe, Pongshe, Vinjhe, Sáthaya, Goundye; of the *vishnuvardhans*, Kidmide, Nene, Paránje, Menhadale; of the *kaundinyas*, Patvardhan, Phanse; of the *nityundans*, Vaishampáyan, Bhádbhoke; of the *bháradvajs*, Achavla, Tene, Darve, Gándhारे, Ghanghurade, Ránáde; of the *gárgyas*, Karve, Gádgil, Londhe, Máthe, Dábke; of the *kapis*, Limaye, Khámbete; of the *jámdagnyas*, Pendse, Kunte; of the *vatsas*, Málse; of the *bábhavyas*, Bál, Behere; of the *kaushiks*, Gadre, Báma, Bháve, Vád, Apte; of the *atris*, Chitale, Áthavle, Bhádbhoke. Besides the sixty ancient surnames named above, there are 244 modern surnames current among them, making a total of 304. Of the ancient surnames 37 belong to the *ashvaláyans* and 23 to the *taitiriyas*; while of the modern, including that of Bhat, by which the family of the Peshwa was denominated, 178 belong to the *ashvaláyans* and 66 to the *taitiriyas*. Dr. Wilson's Indian Caste, 19, 20.

³ Their colour is greenish-grey rather than blue. They are known in Maráthi as cat-eyes, *gháre* or *mánjare* dole.

⁴ The following are some of its peculiarities: *chel*, girl; *hay*, a respectable expression used amongst women in addressing their elders; *ke(n)*, where, *kita(n)*, what; *sa(n)*, am; *me(n)*, I; *vincha(n)*, just before sunset; *te nin*, he; *tyáhaat*, thence; *nay*, river; *phal*, shut; *pahánpati*, early in the morning; *theyala(n)*, put; *hava(n)*, want; *gherni*, taking; *yecha(n)*, coming; *had*, bring; *okhad*, medicine; *mátha(n)*, with me; *gotu*,

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Bráhmans.

Chitpávans.

many respects not easily followed by Maráthi-speaking Deccan Hindus. Out of doors they speak pure Maráthi differing from that spoken in the Deccan only by the more marked pronunciation of the nasal sound, *anusvár*. Many of the best coast villages, owned and held by Chitpávans, are for cleanliness and arrangement a pleasing contrast to the ordinary Indian village. The houses, built of stone, stand in cocoanut gardens or in separate enclosures, shaded with mango and jack trees, and the village roads, too narrow for carts, are paved with blocks of laterite and well shaded. Ponds, wells, and temples add to the general appearance of comfort. The Chitpávans are very clean and tidy. The men wear a turban, *págote*,¹ a sleeved waistcoat, *bandi*, a coat, *angarkha*, the shoulder cloth, *angvastra*, the waistcloth, *dhotar*, and country made shoes, *joda*, in the fair season, and during the rains sandals, *valúnás*. Very few Ratnágiri Chitpávans have taken to the broadcloth coats, trousers, and polished leather shoes so common among the younger of their Bombay caste fellows. The women wear the long full robe, *lugde*, and shortsleeved bodice, *choli*, covering both the back and chest. They wear no shoes, and none, except the very rich, wear woollen shawls. Very neat in their dress and way of wearing the hair, their clothes are generally of cotton, white, or dyed some single bright colour, pink, scarlet, black, green, or primrose. Of ornaments, the men sometimes wear in their right ear a gold pearl-ornamented ring, *bhikbáli*, and gold finger rings, *angthya* or *jodvi*, and the women a pearl-studded nosering, *nath*, and earrings, *bugdya*, gold hair ornaments, *rákhdi*, *ketak*, *chandrakor*, and *kevda*, gold neck ornaments, *thushi*, *putlyáchimál*, *sari*, *pátlya*, *kantha*, *laffa*, and *tik*, and gold bracelets, *goth*, *tode*, *pátlyás*, and *bángdyás*. Young women and girls generally wear silver anklets, *sákhlyás*, and a few women wear gold finger rings, *angthyás*. Girl widows, though they no longer have the red forehead mark, *kunku*, are allowed to wear a bodice and a robe of any colour and ornaments. When she comes of age the girl widow has her head shaved, her glass bracelets broken and her bodice taken off, and is allowed to wear no robes except white or red and no ornaments except gold finger-rings. Like Karhádás, Deshasths, and other Maháráshtra Bráhmans who eat together, except on Vedic sacrificial occasions, Chitpávans are forbidden animal food and spirituous liquors. Like other Konkan people they take large quantities of buttermilk, *ták*. Though not superior to Deshasths and Karhádás in rank, they are held in much respect by most Ratnágiri Hindus, who believe that the sacred texts, *mantrás*, repeated by a Chitpávan have special worth. A very frugal, pushing, active, intelligent, well-taught, astute, self-confident, and overbearing class, they follow almost all callings and generally with success. Many Chitpávans live by begging. Some trust altogether to charity, others add to their profits as

near; *kai*, when; *haday*, to force downwards; *chakhot*, good; *bákura*, for a while; *pekh*, stop; *atrír*, kitchen room; *kínda*, for what; *anuka(u)*, don't want; *yatha*, here; *kedlu*, when; *holche*, speaks.

¹ School boys wear a piece of cloth *mudál* or *pheta* instead of a turban.

husbandmen by starting from their homes in July, after the crop has come up, and, begging through the rich coast villages as far as Pen and Panvel, come back in time for harvest.¹ Others are very skilled husbandmen owning and tilling the richest garden lands in the district, as the local proverb says 'give waste land to a Chitpávan and he will turn it to gold.' Among cultivating Chitpávans many in good positions as *khots* or upper landholders act as moneylenders, and some trade chiefly in grain and other field produce. Others have succeeded well as pleaders, generally increasing their gains by lending them in usury. They have over all India a good name for their knowledge of Hindu lore, and in Bombay and Poona, some of the most distinguished native scholars in Sanskrit, mathematics, medicine, and law, are Ratnágiri Chitpávans. Their scruples about serving under the British have long passed away, and now their favourite occupation is Government service, in which they hold places from the humblest village accountant, schoolmaster, and clerk, to very high and responsible posts.²

Ever ready to push their fortunes in other British districts or in native states, as a class they are successful and well-to-do. All are Smárts, that is followers of Shankarácharya the high priest of the doctrine that God and the soul are one, *advait vedánt mat*, and with equal readiness worship Vishnu, Shiv, and other gods. Their chief places of pilgrimage are Parshurám in Chiplun, Ganpatipule in Ratnágiri, Hareshvar in Janjira, and other places held sacred by all Hindus, as Benares, Allahabad, Gaya, Pandharpur, Násik, and Mahábaleshvar. Like other Bráhmans their chief household gods are Ganpati, Annapurna, Gopál Krishna, Sháligrám, and Suryakánt. Their family priests belong to their own caste. They are divided into religious, *bhikshuks*, and lay, *grahasths*. The religious class can take to other occupations besides acting as priests. A layman may perform ceremonies, but, unless forced to do so, he does not act as a priest, or receive charity gifts, *dán dakshina*. Caste disputes come before a meeting of the local community of Bráhmans, including Chitpávans, Karhádas, Deshasths, Yajurvedis, and Devrukhás, that is all the local Bráhman sub-divisions who eat together. When a difficult religious question is the subject of dispute, the caste refer the point to some learned divines, *shástris*, at places like Benares and Násik, or to the Shankarácharya. The Chitpávans marry among themselves.³

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Population.

Bráhmans.

Chitpávans.

¹ Some Chitpávan, as well as other Ratnágiri Bráhman beggars, pass several months every year in Bombay, Baroda, and other places taking charity gifts, *dán dakshina*, or earning some reward for performing religious services to the lay, *grahasth*, members of their caste.

² For some years after the transfer of Ratnágiri to the British, the Chitpávans were a discontented class. Though every effort was made to give them places, many of the best families, 'from a feeling which deserved respect', refused to take service under the British. Mr. Dunlop, 15th August 1824, Rev. Rec. 121 of 1825, 76-78.

³ Marriages between Chitpavan and Karhada families are not unknown. 'Though condemned by the more aristocratic families, they are contracted without scruple, and involve no pains and forfeitures, either social or religious.' Rav Sáheb Vishvanáth Narayan Mandlik, C S I. Jour. Bom. Br. Ro. As. Soc. VIII 9.

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Population.

Bráhmans.

Karhádás.

The KARHÁDÁS,¹ with a strength of 14,367 souls, are supposed to take their name from Karhád in the Sátára district near the meeting of the Krishna and Koyna. They are found in small numbers over the whole district especially in Rájapur and Devgad. They are probably the descendants of one of the Rishis or Tápasis who fixed on the holy meeting of the Krishna and Koyna rivers as his settlement.² They have many family stocks, *gotras*, whose exact number is not known. Their original country is said to stretch along the Krishna from its meeting with the Koyna on the north to the Vedávati (Várna) on the south,³ but they are now nearly as widely scattered as other Maháráshtra Bráhmans. They have no sub-divisions, all eating together and intermarrying. Though some are fair, as a class they are darker than the Chitpávans, none of them having grey eyes. Except some local dialectic difference, their Maráthi is the same as that of Deccan Bráhmans. In house, dress, and food, they do not differ from Chitpávans. They are clean, neat, intelligent, hardworking, hospitable, and well-behaved. At the same time they are more formal, and less thrifty and enterprising than the Chitpávans. Many of the Karhádá village priests and astrologers are cultivators, some as ordinary husbandmen, and others, over the whole district except Málvan and Devgad in the south, as superior landholders, *khots*. They also engage in moneylending and trade in grain.⁴ But their chief occupation is Government service. On the whole their condition is middling; few of them are rich, still fewer poor, and almost none beggars. Their religion does not differ from that of the Chitpávans. All Karhádás are Rigvedis. Their chief household goddesses are, besides those worshipped by the Chitpávans, Mahálakshmi and Durga. As among Chitpávans, caste disputes are settled at a meeting of all the local Bráhmans who eat together. Unlike the Chitpávans the marriage of a brother's daughter and of a sister's son is not unusual. They sometimes marry with Deshasths. Strong, temperate, hardworking, and not less anxious than the Chitpávans to educate their children, the Karhádás are a rising class.

Devrukhas.

DEVROKHÁS,⁵ with a strength of 5727 souls and their head-quarters at Devrukha in Sangameshvar, are found in considerable numbers all over the Ratnágiri sub-division, and occasionally in all parts of the district except Málvan and Devgad. They are said to have originally come to these parts as revenue farmers. Their only division is into family stocks, *gotrás*. They are generally strong and healthy like the Karhádás, but somewhat darker. Their women are strong, dark, and healthy. Except for some local peculiarities their home

¹ The great Maráthi poet Moropant (1750) belonged to this caste.

² The slander in the Sahyadri Khand, that the Karhádás sprang from asses' or camels' bones, is probably a pun on the word *karhád*, as if *khar-had*, ass-bone. Tradition has a reproach against their name that in former times they occasionally poisoned their sons-in-law, visitors, and strangers as sacrifices to their goddess in the hope of securing offspring, *vinsherviddhi*.

³ Ind. Ant. III. 25.

⁴ The leading bankers of Khárepátan in Devgad are Karhádás.

⁵ Devrukha comes from the Sanskrit Dev-Rishi or Devarshi. The Devarshis were a *shákha* of the *Atharva-Ved*. The Devrukhas may be remnants of this *shákha*. Dr. Wilson's Indian Caste, 25.

tongue is the ordinary Maráthi. Their houses, dress, and food do not differ from those of the Karhádás. The Devrukhás are hard-working, hospitable, sober, thrifty, and hot tempered. As a class they are rather poor, many of them being employed as cooks by other Bráhmans. Most are cultivators, both small and large proprietors. They are much given to irrigation, most of their villages standing in places where good supplies of river water are available. Only a few engage in trade or enter Government service. Among Bráhmans they hold rather a low position. Several Chitpávans, Karhádás, and Deshasths object to dine with them, rather because they are thought poor and unlucky, than from the idea that they are of lower origin. Their religion does not differ from that of the Chitpávans. They marry among themselves. Their caste disputes are decided at a meeting of all the local Bráhmans who eat together. They send their children to school, but on the whole are not a rising class.

DESHASTHS, with a strength of 777 souls, originally from the Deccan, are found all over the district, but chiefly in Khed, Chiplun, and Ratnágiri. Of their arrival in the Konkan no special story is told. They would seem to have come in small numbers at different times. Except family stocks, *gotrás*, of which the exact number is not known, they have no sub-divisions.¹ Most of them are darker, coarser looking, and more vigorous than Chitpávans or Karhádás. They speak pure and correct Maráthi. Except that they are less neat and clean, their houses and dress do not differ from those of Chitpávans. They marry as a rule among themselves and sometimes with Karhádás. In Khed they are hereditary district officers. Some are *khots* and some are under-landholders; others are traders and shopkeepers, and a few are in Government service. Though not so clever or frugal as the Chitpávans, they are more lively and hospitable. Besides the gods worshipped by the Chitpávans the Deshasths worship Khandoba. In the Sahyádri Khand, their original country is said to extend from the Narbada to the Krishna and the Tungbhadra rivers excluding the Konkan. In religion they do not differ from Chitpávans or Karhádás. As among Chitpávans and Karhádás, caste disputes are settled at a meeting of the whole local community of Bráhmans who eat together. They send their children to school, and on the whole are a rising class.

KIRVANTS, with a strength of 70 souls, are found only in a few Málvan villages. According to the Sahyádri Khand they are sprung from twelve Bráhmans, whose original seat was near the Gománchal (region of the Gománt mountain). As a class they are badly off, some of them cultivating but most living as beggars. They sometimes marry with Chitpávans. But these Chitpávans are then considered Kirvants, and other Chitpávans do not intermarry with them. Their name, *kirvant*, is generally said to mean insect, *hide*, killers, because in working their betel gardens they destroy

Chapter III.

Population.

Bráhmans.

Devrukhás.

Deshasths.

Kirvants.

¹ Deshasths are generally Rig-Vedis, but some of them read the Sāma-Ved and also the Atharva-Veda. Dr. Wilson's Indian Caste, 18.

Chapter III.

Population.

Bráhmans.

Shenvis.

much insect life.¹ Another explanation is that the proper form of the name is Kriyávant, and that they were so called because they conducted funeral services, *kriya*, an occupation which degraded them in the eyes of other Bráhmans.²

SHENVIS, with a strength of 13,669 souls, are found all over the district, but chiefly in Málvan and Vengurla. Goa was their original Konkani settlement, where, according to the Sahyádrí Khand, they are said to have come at Parshurám's request from Trihotra or Tirhut in northern India. This legend is probably confirmed by the fact that especially in Goa, Shenvis, like Bengális, freely rub their heads with oil, and also like them are fond of rice gruel, *pej*, and fish. The honorific *Báb*, as in Purushottam *Báb*, is perhaps a corruption of *Bábu* in Bengáli.³ Their broad pronunciation of vowel sounds is also like that of the Bengális.⁴ Though they fled from Goa to escape conversion by the Portuguese, every family has still a private idol there. They claim to be Sárasvat Bráhmans of the Panch Gaud order. Besides Shenvis proper, who are of two sects Smárts and Vaishnavs, there are seven local divisions,⁵ Bárdeskars, Kudáldeskars, Bhálávalkars, Pednekars, Lotlikars, Divádkars, and Khadpekájules, each claiming superiority over the other, dining together in some cases, but not intermarrying. Of the local divisions, except Bárdeskars, none seem to have come from Goa. Though some are fair, as a class they are darker than the Chitpávans. Their women are well made, fair, and graceful. They speak Maráthi, but at home with many Konkani peculiarities.⁶ Their houses are strong and well built, but not so clean as those of the Chitpávans. Their dress is like that of the Chitpávans. The women are fond of decorating their hair with flowers. All Shenvis eat fish and some eat mutton. Other Bráhmans assert that the Shenvis are inferior, *trikarmi*, Bráhmans.⁷ But among the Hindus of the district, they hold a higher position than the Javal Bráhmans. As a class they are well-to-do. Most of them are superior landholders and hereditary officers, *kulkarnis* and others, and only a few are cultivators. Others engage in cotton and grain trade; some are shopkeepers and bankers, and a good many

¹ Ind. Ant. III. (1874), 45.

² Mr. Ganpat Venkatesh Limave, B.A., Dep. Ed. Inspector, Ratnagiri.

³ Rev. Panadur Shankar Pandurang Pandit, Oriental Translator to Government.

⁴ Professor R. G. Bhondarkar, M.A., Hon. M.R.A.S.

⁵ They belong to ten *gotras*, Bharadvaj, Kaushik, Vatsa, Kaundinya, Kashyap, Visishtha, Jamdagya, Vishvamitra, and Gautam.

⁶ Among the peculiar words used by Ratnagiri Shenvis are: *Jhil*, son; *chedu*, girl; *bapus*, father; *aus*, mother; *daji*, an honorific; *ghor*, husband; *bhitur*, within; *kha(n)g*, where; *asa(n)g*, am; *tenda*, by him; *tha(n)g*, there; *nhaq*, river; *dhak*, shut; *phátphati*, early in the morning; *rhaya(n)*, want; *geta(n)g*, I come; *okhad*, medicine; *bakra*, for a while; *car*, stop; *ránpap ghor*, kitchen room; *kityák*, for what; *ha(n)g*, here. In masculine nouns the Maráthi final *i* is generally changed to *o* as *ghodo*, horse; *ambo*, mango; and *dolo*, eye. The plural of feminine nouns in *i* also ends in *o* as *nadyo*, rivers; *káthygo*, sticks. The third person singular of verbs ends in *a* instead of *o* and *e* in the present, and in *o* instead of *a* in the past, as, he or she goes, *jata*; he went, *gelo*.

⁷ That is, of the six Bráhman functions, *karmas*, sacred study, sacred teaching, alms-giving, alms-receiving, sacrificing for one's self, and sacrificing for another, a Trikarimi is vested only with three, sacred study, alms-giving, and sacrificing for one's self.

enter Government service. Fond of show and somewhat extravagant, in intellect and energy Shenvis can hold their own even with Chitpávans. They rose to high office under Sindia, and now, in Bombay and elsewhere, hold high posts as barristers, professors, pleaders, physicians, and merchants. Most of them are well-to-do. Their chief household gods and goddesses are Mángirish (Mangesh), Mahálakshmi, Mhálasa, Shánta-Dúrga, Nágesh, Bindu Mádhav, and Saptakotishvar. They have two head priests, *svámis*, one Smárt living in Sonavda in Kánara, and the other Vaishnav living in Goa. They have rich monasteries, *maths*, in Kháuápur, Kárwár, Bombay, Násik, and Benares. Their family priests are either Shenvis or Karháda Bráhmans. They have no peculiar customs. Caste disputes are settled by a caste meeting of the members, and finally referred to the head priests, *svámis*. Eager to educate their children, and ready to follow any promising calling or profession, Shenvis seem likely to keep their high place as one of the most intelligent and prosperous classes of west India Hindus.

JAVAL Bráhmans, with a strength of 1277 souls, have their head-quarter at Burundi in Dápoli, and are found in small numbers over almost the whole of that sub-division. According to the ordinary story, the Javals take their name from being shipwrecked in a storm, *javal*. They probably always claimed to be Bráhmans. But their position was not recognised till (1767) Parshurám Bháu Patvardhan, a relation of the Peshwa's, in return for some service, established them in the rank of Bráhmans. They have no divisions. Sturdier and much darker than Chitpávans, their home tongue is a rough Maráthi like that spoken by Kunbis. Their houses, seldom large or well built, do not differ from those of the better class of cultivators. Except that they are less careful of their appearance, the dress, both of men and women, does not differ from that of Chitpávans. Their rules about food come between those of the Bráhman and other classes. They eat fish but no other kind of animal food, and refrain from liquor. Though they rank as Bráhmans they hold a low social position, other Bráhmans neither marrying nor dining with them. Some of them are employed by other Bráhmans as water carriers, but almost all are cultivators. They are frugal, hardworking, and skilful husbandmen. As domestic servants they are honest, good tempered, and well-behaved. They worship Vishnu and Shiv, and have almost the same household gods as Chitpávans. Caste disputes are settled at a general meeting of the members. They do not send their children to school, and show no sign of rising above their present state as cultivators.

KANOJÁS, numbering 40 souls, originally came, as their name shows, from Kanauj in north India. They seem to have come into Ratnágiri in small numbers at different times, either as beggars or as pensioned soldiers. Though not so fair as the Chitpávans, they are larger and better made. Their home tongue is Hindustáni, but they also speak Maráthi. Their houses are small but clean. In their dress and food they do not differ from the Chitpávans. They neither dine nor intermarry with Konkanasth Bráhmans. Except some of the pensioners who are well-to-do, they are poor, working

Chapter III.

Population.

Bráhmans.

Shenvis.

Javals.

Kanojas.

Chapter III.**Population.****Hindus.**

either as water carriers or earning their living by begging. They are found only in towns, and none engage in cultivation or trade. They are clean, neat, hardworking, and honest, but hot tempered. Most of them worship Vishnu and are religious. They marry among themselves.

Writers.

The only class of Writers are Káyasth Prabhus with a strength of 664 souls (males 341, females 323). They are found in very small numbers all over the district, but chiefly in the north, in Dápoli, Chiplun, and Khed. Among Káyasth Prabhus there are no subdivisions. Except that none have light eyes, they do not, in appearance or dress, differ from Bráhmans. They speak Maráthi correctly and have no separate dialect. They eat fish, mutton, and game, but not domestic fowls. They are clean, neat, and hardworking, and in former disturbed times had a name for faithfulness and bravery. Though frugal in straitened circumstances, when prosperous they are hospitable and fond of show and pleasure. Some are in Government service, some are cultivators, and a few are hereditary officers or the holders of land grants. In religion they do not differ from Bráhmans. Their chief household god and goddess are Khandoba and Bhaváni. Their family priests are Bráhmans. They do not intermarry with other castes. Caste disputes are settled by a mass meeting of the castemen. They send their children to school, and are on the whole prosperous.

Traders.

Under the head of Mercantile, Trading, and Shopkeeping classes come six castes with a strength of 36,299 souls (males 18,142, females 18,157), or 3·85 per cent of the whole Hindu population. Of these 32,569 (males 15,936, females 16,633) are Vánis; 1216 (males 798, females 418) Lingáyats; 1051 (males 553, females 498) Jains; 927 (males 507, females 420) Gujars; 507 (males 325, females 182) Bhátíás; and 29 (males 23, females 6) Márvádís. The VÁNIS, found all over the district and said to have come from north India, are known by the names of the towns where they first settled, Sangameshvari, Pátane,¹ and Kudáli. These sub-divisions do not marry or eat together. Among them the Kudális claim superiority wearing the sacred thread and forbidding widow marriage. They all speak Maráthi, but those who live in Málvan and Vengurla have many Konkan peculiarities. Most of them live in good houses. They are active, intelligent, sober, thrifty, and in fair condition. They allow widow marriage, eat animal food, and drink liquor. Most Vánis are shopkeepers, some are husbandmen, and a few are Government servants. Their family priests are Bráhmans, and they do not differ from Maráthás and Kunbis in religion. They eat with no other caste. They show special respect to members of certain families called *Shetiús*, who have the hereditary right to preside at caste meetings. Other families known as *Mahájans*, inferior to *Shetiús*, hold a position of special honour. They send their children to school and on the whole are a rising class. LINGÁYATS, 1216 souls, are found chiefly in Rájápur and Sangameshvar. They are said to be partly immigrants from the

Vánis.**Lingáyats.**

¹ The Patane Vánis are said to take their name from Patan in Satara.

Deccan, and partly local converts especially from the neighbourhood of Sangameshvar.¹ Rather dark in colour, most of them live in houses of the better class, and take neither animal food nor liquor. They are in middling circumstances, some of them husbandmen, others retail dealers and pedlars who buy stocks of cloth and spices in the towns, and carrying them to villages sell or barter them for grain. They have separate temples and priests of their own known as *jangams*. The Lingáyats worship the *ling*, and always carry an image of it in a small box, either tied to the left arm or hanging round the neck. Their religion widely differs from that of other Hindus by holding that a true worshipper cannot be made impure, and so setting the members of the sect free from the need of purification after a family birth or death. Originally doing away with caste differences, after the first spread of the new faith, the old social distinctions regained their influence, and the sect is now broken into several sub-divisions who neither eat together nor intermarry. Not a very vigorous or pushing class, the Lingáyats take little trouble to have their children taught, and show no signs of rising above their present position.

Chapter III.

Population.

Hindus.

Traders.

Lingáyats.

JAINS, 1051 souls, are found chiefly in the south. They are believed to have come from the Karnátak and in appearance resemble Lingáyats. Most of them live in good houses. They are strict in matters of diet, using no animal food and taking no liquor. Among Vánis they hold a good but isolated position. Traders, most of them well-to-do, they are frugal and thrifty and have a good name for fair dealing. They are religious, worshipping the saints called Tirthankars. They have their own priests, Gorjis and Jatis. Their only temple at Khárepátan is dedicated to Párasnáth the twenty-third saint. They are educating their children and show signs of improvement. Besides these Jain Vánis who are more or less late comers, and openly and carefully observe the rules of their faith, there are, in certain classes, traces of a time when the Jain was the ruling form of faith.² These traces are chiefly found among Guravs, or temple servants, and Kásárs, or coppersmiths. The members of both of these classes hold aloof from Bráhmans and Bráhmanic Hindus, refusing, however high their caste, to take water from their hands, and the Kásárs have as priests, *gurus*, Jains from the south Deccan. The Guravs, servants in village temples, like the Kásárs, in matters of eating and drinking, hold aloof from Bráhmanic Hindus. Though the village temples are now dedicated to some Bráhman god, there are near many of them the broken remains of Jain images, and most temple land grants seem to date from a time when Jainism was the state religion. A curious survival of Jainism occurs at Dasara, Shinga, and other leading festivals when the village deity is taken out of the temple and carried in procession. On these occasions, in front of the village god's palanquin, three, five, or seven of the villagers, among whom the *gurav* is always the leader,

Jains.

Traces of
Jainism.

¹ Basav (1150), the founder of the Lingáyat sect, is said to have settled for some time at Sangameshvar. Wilson's Mackenzie Collection. II. 4 and 10.

² A king of Sávantvádi, a very learned Jain, is mentioned in an old Belgaum legend. Ind. Ant. IV. 140.

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Population.

Hindus.
Traders.

carry each a gaily painted long wooden pole resting against their right shoulder. At the top of the pole is fastened a silver mask or hand, and round it is draped a rich silk robe. Of these poles the chief one, carried by the *gurav*, is called the Jain's pillar, *Jaináchá Khúmb*.¹

Gujars.

GUJARS of the Porvád, Nema, Umad, Khadáyata, and Shrimáli sub-divisions are found all over the district, especially in Dápoli, Khed, and Chiplun. They are settlers from Gujarát and occasionally visit their own country. Though they understand and speak Maráthi, their home tongue and the language in which they keep their accounts is Gujaráti. They are fair and most of them strong and healthy. They generally live in good brick-built houses, and dress like Bráhmans, except that the end of the women's robe, *lugda*, is drawn over the left instead of the right shoulder, and that they do not pass the robe between the legs. They are strict vegetarians, and for their evening meals never take rice, but eat bread, pulse, and milk. All are traders dealing in grain, spices, and cloth, and lending money. Most of them live in towns, occasionally moving about the country either as pedlars or to recover their outstandings. As a class they are well-to-do. Except Porváds, Nemás, and Umads, who are Shrávaks or Jains, the Gujars are Vaishnavs of the Vallabháchári sect. They have their own family priests, Gujaráti Bráhmans. They marry only among their own sub-divisions and often form connections with families in Gujarát. The Vaishnavs pay great respect to their head priest, *Maháráj*, who occasionally visits the large towns. Though they have settled in Ratnágiri for more than a century, Gujar Vánis have kept their own customs and do not mix with the other Vánis of the district. They are bound together as a body, and refer caste disputes to arbitrators chosen at a meeting of all the male members. Anxious to have their children taught, they are as a whole a pushing and prosperous class. BHÁTIÁS, with a strength of 339 souls, are found at Chiplun, Rájápur, Málvan, and Vengurla. Coming through Bombay from Cutch and north Gujarát, almost all the Bhátiás have settled in Ratnágiri within the last fifty years. Most of them can speak Hindustáni and a broken Maráthi, and even Konkani in Málvan and Vengurla, but their home tongue is Gujaráti. They are a strong sturdy class inclined to stoutness, some of them fair with handsome regular features. Almost all live in towns in large well-built houses. They keep to their Gujaráti dress. They are strict vegetarians and take no intoxicating drinks. Large merchants and shipowners, their chief dealings are with Bombay, Cochin, and Kálikat. They mostly deal in cotton, grain, coconuts, betelnuts, dates, cocoa kernels, molasses, sugar, groundnuts, butter, and oil. A pushing active class, though settled in Ratnágiri, they occasionally move to Bombay and Cochin. They are prosperous and well-to-do. Careful to teach their children, strong, unscrupulous, and ready to take advantage of any new opening or industry, the Bhátiás seem likely to hold the place they have gained as the leading district

Bhátas.

¹ Contributed by Rao Bahadur Shankar Pandurang Pandit, Oriental Translator to Government.

traders. In 1877 they took the chief part in managing the immense imports of grain for the Deccan and southern Marátha famine districts. Lohánás, twenty in number, are like the Bhátíás traders from Cutch and north Gujarát.

MÁRVÁDIS, numbering 29 souls, are found in some of the chief towns of the district. Most of them are late arrivals, coming through Bombay from Márwár. They all know Maráthi, but among themselves speak Márvádi. Strong pushing men, they wear the hair long and most of them have long scanty beards. They generally keep to the dress of their own country, the small tightly-wound red and yellow or pink turban, the tight full coat, and the waistcloth. The women wear a robe and open-backed bodice and a piece of red or pink cloth thrown over the head and shoulders. They are strict vegetarians and very temperate, allowing few luxuries but tobacco. As their favourite occupation of moneylending is almost entirely in the hands of the superior landholders, Márvádís make little way in Ratnágiri. Besides the few families settled as shopkeepers and traders dealing in spices and cloth, some come yearly in the fair season from Bombay as travelling jewellers. They are Jains by religion with Baláji as their household god. They have no temples in the district. As their number is very small, they generally go to their own country to marry.

Under the head of Husbandmen come nine classes with a total strength of 583,730 souls (males 277,868, females 305,862)¹ or 62·02 per cent of the whole Hindu population. Of these 284,267 (males 135,273, females 148,994) were Kunbis; 203,406 (males 97,467, females 105,939) Maráthás; 70,796 (males 33,671, females 37,125) Bhandáris; 12,772 (males 5753, females 7019) Shindes; 622 (males 307, females 315) Mális; 488 (males 256, females 232) Pharjans; 319 (males 156, females 163) Ghádis; 4025 (males 1805, females 2220) Mit-gávdás; and 7035 (males 3180, females 3855) Gávdás.

KUNBIS, with a strength of 284,267 souls, are found all over the district, but chiefly in the northern sub-divisions. According to Hindu books, Kunbis are the descendants of pure Skudras. Of their former settlements or the date of their arrival in Ratnágiri nothing has been traced. Their home tongue is Maráthi spoken more roughly and less clearly than by Bráhmans, but differing little in words or grammar. They are smaller, darker, and more slightly made than the Deccan Kunbi. The men shave the head except the top knot, and wear the mustache and sometimes whiskers, but never the beard. The women are small, and as a class rather plain and hardfeatured. Few of them have good houses. Most live in small thatched huts with few signs of cleanliness or order. The men generally work in the fields bareheaded, and with no body clothes except a piece of cloth, *langoti*, worn between the legs. A few of them, in the cold season, wear a woollen waist-

Chapter III.

Population.

Hindus.

Traders.

Márvádís.

Husbandmen.

Kunbis.

¹ The excess of females over males is probably due to the fact that when the census was taken more men than women were away at work in Bombay and other places.

Chapter III.**Population.**

Hindus.

Husbandmen.

Kunbis.

coat or blanket thrown over the head, and in the rains a blanket or a rain shield, *irle*, of plaited *palas* or *kumbha* leaves. On holidays, and at weddings and other great occasions, the men wear small turbans generally white, rolled something in the form of the Marátha head-dress, but more loosely and with less care. In the fields the women wear the Maráthi robe, *lugde*,¹ sometimes with a bodice, and in the rainy season on their heads a leaf shield. For great occasions they have generally a new robe and bodice. Their staple food is *nágli* and *vari* cakes. They do not object to animal food, eating dried fish and chickens, and when they can afford it killing a male goat or sheep. Beef, either of buffalo or cow, they never touch. They eat deer and wild hog and allow animal food at their caste feasts. They rear fowls, and have nothing of the Rajput feeling against eating them. All smoke and a few chew tobacco. They are allowed to drink liquor, and among coast Kunbis drunkenness is not uncommon. Their usual drink is cocoa-palm juice, generally fermented, but sometimes distilled. All are cultivators, steady and hardworking; but from their numbers and the poorness of the soil they are scarcely supported by what their fields yield. Many make up the balance, and earn enough to meet marriage and other special expenses by seeking employment in Bombay, working as carriers, labourers, or garden or house servants, or in the steam spinning and weaving factories where whole families find well paid employment. A very quiet, easy tempered, and orderly class, singularly free from crime, they have much respect for the gods, believing chiefly in such village gods and goddesses as Bahiri, Bhaváni, Somái, and Sálubái. They believe in witchcraft and evil spirits, and to avert the anger of the gods offer cocoanuts, cocks, sheep, and goats, when any of their family are sick. When a child is to be named, the father goes to a village Bráhmaṇ and tells him that his wife gave birth to a daughter or son on such and such day at sunrise or sunset as the case may be. The Bráhmaṇ, referring to his almanac, tells that the child should be named so and so according to the position of the stars, the first letter of the star and of the name being the same. For this the Bráhmaṇ gets a pice. Caste disputes are settled by a mass meeting.

Maráthás.

MARÁTHÁS, with a strength of 203,406 souls, found all over the district, are specially numerous near the Sahyádrí hills. The Maráthás claim to be the descendants of Rajput families, some of whom came to serve under the Bijápur government. The class forms two great divisions, those with and those without surnames. Families with surnames hold themselves to be the only pure Maráthás, asserting that the others are the offspring of mixed or unlawful marriages.² The home tongue of all is Maráthi, but especially to the south, different from Bráhmaṇ Maráthi, and in many points

¹ Their way of wearing the *lugde* differs from that of the Deccan women. All lower class Konkan women wear it pulled above the knee, the end passed between the legs and tucked into the waistband. In the Deccan it falls below the knees and is not passed through the legs.

² At the same time some of the Kunbis have the same surnames as Maráthás.

much more like the Konkani dialect. Stronger, more active, and better made than the Kunbi, many of them, even among the poorer classes, have an air of refinement. The men shave the head except the top knot, and wear a mustache, and sometimes whiskers, but never the beard. Most of them live in ordinary second class village houses. The pure Maráthás wear a flat four-cornered turban of twisted cloth. In other respects their every day and show dress do not differ from those of the Kunbis. Of most the staple food is cheap rice or *náchni*, the well-to-do always, and all of them on high days, adding some pulse. They eat fish, fowls, and mutton, and of game, deer and wild hog, and generally use animal food at their marriage dinners, often getting the animal's throat cut by some temple servant and offering the blood to the god.¹ Though seldom to excess, they drink toddy and other liquors, and freely use tobacco. Though Maráthás and Kunbis eat food cooked by each other, they will not dine from the same dish, and, at big feasts, sit in separate rows. Intermarriage is not allowed.

As a rule all the Ratnágiri *vatandár* Maráthás of a village have the same surname and when one dies the rest go into mourning. Their surnames such as Kadam, More (*Maurya*), Shellke (*Chalukya*), Pálav, Dalvi, Kander, and others show their connection with old ruling tribes.² Though most of them are cultivators, a large number are soldiers, no caste supplying the Bombay army with so many recruits as the Ratnágiri Maráthás. Others go into the police or find employment as messengers. A few are becoming clerks and schoolmasters. As it has been to the Kunbis, the opening of Bombay spinning and weaving factories has been a great gain to Ratnágiri Maráthás, whole families finding work and earning high rates of pay.³ Like the Kunbis, orderly, well-behaved, and good-tempered, the Maráthás surpass them in courage and generosity. Very frugal, unassuming, respectable, and temperate most of them bring back to their homes considerable sums of money. They are a very religious class, ready to consult the village god or his attendant in any matter of difficulty. Their family priests and astrologers, generally Chitpávan Bráhmans, are treated with much respect. Some among them wear the sacred thread, *jánve*, renewing it yearly in *Shrávan* (August). Their practice in the matter seems very loose. All claim the right to wear the thread, but as it has to be renewed every year and the ceremony seldom costs less than 6d. to 1s. (4-8 *annas*), they do not all wear it. It often happens that only one brother of a family adopts the practice. Caste disputes are settled by a mass meeting of the caste. On the whole they are a prosperous class, hardworking,

Chapter III.

Population.

Hindus.

Husbandmen.

Maráthás.

¹ At *Dnsara* in some villages a buffalo is slain. The flesh is not eaten by the Maráthás, but generally scattered round a temple as food for spirits, *bhuts*.

² Besides these, the Maráthás bear many surnames such as Jádav, Chohán, Shinde, Dabekar, Pavár, Medekar, Thamre, Gogvale, Jámlé, Khetle, and Sávant.

³ A clever weaver earns from 40s. to 60s. a month, his wife 16s. to £1, and each child of six years and over 10s. to 12s. Weaving jobbers get from £4 to £5 and head jobbers from £8 to £10.

Chapter III.**Population.****Hindus.****Husbandmen.***Bhandāris.*

active and pushing, and as education spreads a larger number will probably rise to high positions.

BHANDĀRIS, numbering 70,796 souls, are found in most parts of the district, but chiefly in the coast villages. They supplied the former pirate chiefs with most of their fighting men, and the name seems to show that they were originally used as treasury guards.¹ They have four sub-divisions, Kite, More, Gaud, and Shinde, who neither intermarry nor eat together. Of these the Kite is the highest, claiming as their own the coast from Goa to Bānkot. Their home tongue is a rough Maráthi. A strong, healthy, and fine-looking set of men, they are generally well housed, and in dress are extravagant, very fond of bright colours, and when well-to-do, dressing in Bráhmaṇ fashion. The women dress like Kunbis and Maráthás. Their rules about animal food are almost the same as those of the Maráthás, but unlike them they refrain from intoxicating drinks. In social position they are below the Maráthás, who do not eat with them, nor do Bráhmaṇs employ them as house servants. Some of them are cultivators and others sailors, soldiers, and police. A few are moneylenders and most own cocoanut trees or are engaged in the liquor trade. A strong, pushing tribe, they are fond of athletic exercises especially of wrestling. They employ Bráhmaṇ family priests and pay them great respect. In other points they do not differ from the Maráthás and Kunbis. They are not bound together as a body. Caste disputes are settled by a mass meeting of adult men. Though ready to take to new callings, few of them send their children to school, or have risen to any high position. SHINDES, numbering 12,772 souls, found in small numbers all over the district, are the descendants of female slaves. In their language and appearance, and in their rules about food and dress, they do not differ from Maráthás. Pure Maráthás and Kunbis look down on them. But if a Shinde succeeds, after a generation or two, his children pass as Maráthás, and are allowed to marry into lower class families. As a class they are intelligent and well-to-do, living as cultivators and entering Government service in which some have risen to high offices.

*Shindes.**Mális.*

MÁLIS, numbering 622 souls, are scattered over the district. They probably found their way to Ratnágiri from the Deccan where their caste is strong and widespread. They dress and eat like Maráthás, and differ little from them in look or dialect. A hardworking, quiet, and sober class, most of them are husbandmen, gardeners, and some are day labourers. PHARJANS, literally children, numbering 488 souls, are found only in the south of the district. In former times it was, and still to a less extent is, the practice for the rich to keep female servants, *kunbis*, to attend on the women of the family and as concubines. The children of these maidservants form the class of Pharjans. They are almost all husbandmen, and except that they hold a lower position, marrying only in their own class, differ little from Maráthás and Kunbis. GHĀDÍS, numbering 319 souls, are found in Rájápur, Devgad. and Málvan. Originally the lower

*Pharjans.**Ghādis.*

¹ Two hundred years ago (1673) among the Bombay guard were 300 Bhandarins armed with clubs and other weapons. Fryer's New Account, 66.

temple servants, whose chief duty is to cut the throat of animals offered to the gods, many of them now live as husbandmen and field labourers. GÁVDÁS, numbering 11,379 souls, are found in the south of the district chiefly in Málvan and Vengurla. They seem to be a class of Maráthás who formerly held the position of village headmen.¹ They have two divisions, Gávdás husbandmen and cartmen, and Mit-Gávdás salt makers. The latter, who work on the salt pans of Mitbav, Áchra, Málvan, Kochra, Vengurla, and Shiravda, hold a degraded position. No Hindus but Mhárs will eat from them.

Of Manufacturers there were four classes with a strength of 20,602 souls (males 10,177, females 10,425) or 2·18 per cent of the whole Hindu population. Of these 16,879 (males 8278, females 8601) were Telis, oil pressers; 1694 (males 829, females 865) Koshtis, weavers; 1591 (males 822, females 769) Sális, weavers; and 438 (males 248, females 190) Sangars, weavers of coarse woollen cloth and blankets. TELIS, or oil pressers, are found all over the district but chiefly in Málvan. They are of two divisions Lingáyat Telis and Somváre Telis. The Lingáyat Telis are vegetarians and make cocoanut, sesamum, and *undi* tree oil and are husbandmen and labourers. The Somváre Telis, in addition to the above occupations, enter Government service as messengers. The Telis are hardworking, sober, and thrifty. KOSHTIS, SÁLIS, and SANGARS, though of different castes, all follow the craft of weaving. They are found all over the district in small numbers. The Sangars, properly *sankars* or workers in hemp, make blankets, *kámblis*; and the Koshtis and Sális work cotton and silk. Owing to the competition of European goods, the condition of the Koshtis and the Sális is somewhat depressed. Of Artisans there were twelve classes with a strength of 46,998 souls (males 23,506, females 23,492) or 4·99 per cent of the whole Hindu population. Of these 15,377 (males 7602, female 7775) were Sutárs, carpenters; 11,442 (males 5714, females 5728) Kumbhárs, potters; 12,733 (males 6320, females 6413) Sonárs, goldsmiths; 1828 (males 992, females 836) Lohárs, blacksmiths; 3058 (males 1530, females 1528) Kásárs, brass and coppersmiths; 462 (males 253, females 209) Tábats, coppersmiths; 41 (males 23, females 18) Otáris, casters; 33 (males 16, females 17) Ghisádis, blacksmiths; 10 (males 7, females 3) Pátharvats, stone hewers; 4 (males 3, female 1) Rangáris, dyers; 2 (male 1, female 1) Gaundis, masons; 2008 (males 1045, females 963) Shimpis, tailors. Of these classes, the most important found all over the district are the carpenters, Sutárs, the goldsmiths, Sonárs, and the blacksmiths, Lohárs. SUTÁRS, working both as carpenters and blacksmiths, and LOHARS, working only as blacksmiths, are very useful to husbandmen. They make and mend their field tools, and are paid in grain at harvest time. Most of them cultivate in addition to their calling as carpenters. SONARS make and renew gold and silver ornaments.

Chapter III.

Population.

Hindua.

Husbandmen.

Gávdás.

Craftsmen.

¹ From *gar* a village. In the Kanarese districts, the village headman is still known as *gavda*. In Málvan there are a few Bhandaris whose surname is Gavda, but they are distinct from this class.

Chapter III.**Population.**

Hindus.

Craftsmen.

As a class they are better off than the Sutárs and Lohárs, but have a bad name for dishonesty. KUMBHÁRS are found in large numbers especially in Málvan, making earthen pots, tiles, and bricks. They are hardworking and mostly poor. KÁSÁRS and TÁMBATS are generally found in large towns. They work in copper and brass, and are mostly well-to-do. SHIMPIS are found in large villages and towns. They are tailors by profession and live by making clothes.

Players.

Of Actors there were five classes with a strength of 20,108 souls (males 9698, females 10,410) or 21·3 per cent of the whole Hindu population. Of these 17,990 (males 8796, females 9194) were Guravs; 1321 (males 752, females 569) Devlis; 418 (all females) Bhávins, prostitutes, some of whom are skilled singers and dancers; 69 Kalávantins, professional dancing and singing girls; and 310 (males 150, females 160) Bhorpis. GURAVS are of two classes Lingáyats and Bháviks; the Bháviks found throughout the district and the Lingáyats only in a few villages. Bhávik, or faithful Guravs, besides drumming and at marriages playing on the clarion, *sanaí*, have generally charge of the village gods; and, as *pújáris*, being believed to influence the gods, are much respected by the lower classes. Some by cultivation add to their gains as musicians, drummers, and players. The Lingáyat Guravs, worshippers of *shivling*, are all temple servants.

Bhávins.

The BHÁVINS and DEVLIS,¹ found only in the south divisions of Vengurla, Málvan, and Devgad, are said to be descended from the female servants of some of the Sávantvádi or Málvan chiefs, who were presented with lands and dedicated to the service of the village gods. Of these people the Bhávins are the female and the Devlis the male offspring. Among her daughters a Bhávin chooses one to succeed her as a temple servant, and when the girl comes of age, she is dedicated by pouring over her head oil from the god's lamp. The Bhávin practises prostitution and differs from a common prostitute, *kushin*, only in being dedicated to the god. Much lower in position than a professional singer or dancer, she is not allowed to sing or dance in public and no regular musician ever accompanies her. Except the one chosen to succeed her mother, the daughters of a Bhávin are married to the sons of some other Bhávin. These sons, called Devlis, weak but sharp and good-looking and in their dress neat and clean, earn their living as drummers or strolling players, and a few as husbandmen or village temple servants. According to their rules, the sons and daughters of Bhávins and the sons and daughters of Devlis cannot intermarry. Bhorpis, or rope dancers, a dark well-made class, generally come from the Deccan in gangs of about twenty with a few donkeys, goats, pigs, and dogs. They generally stop near some large village in their temporary huts, which they carry with them, both men and women performing jumping and rope dancing tricks. The women, prostitutes in

¹ Contributed by Mr. Ganpat V. Limaye, Dy. Ed. Inspector

their youth, generally settle down in later life to marry one of their own tribe. As a class they are badly off and show no signs of improving.

Of Personal Servants there were three classes with a strength of 12,669 souls (males 6080, females 6589) or 1·34 per cent of the whole Hindu population. Of these 8683 (males 4169, females 4524) were Nhávis, barbers; 3985 (males 1910, females 2075) Párits, washermen; and one Bhisti, water-drawer. The barbers as a class are badly off. Some going to Bombay improve their condition, but most are poor, forced to cultivate to eke out a living.¹ The washermen as a rule live close to towns, and most of them are well off. Those of Ratnágiri, Dápoli, and Bánkot are considered the best in the district. Some of them add to their earnings by tilling land.

Of Herdsmen and Shepherds there were two classes with a strength of 18,505 souls (males 9234, females 9271) or 1·96 per cent of the whole Hindu population. Of these 14,396 (males 7095, females 7301) were Gávlis, and 4109 (males 2139, females 1970) Dhangars. GÁVLIS are cattle keepers, settled in towns and large villages mostly in well-built houses. Some cultivate and are employed as day labourers and servants, and at Ratnágiri some keep carts for hire, but their chief means of living is by selling milk and butter, in which, as almost all classes compete, the profit is small. The men look after and milk the cattle, leaving to the women the work of selling the milk and butter. DHANGARS are an inferior class of shepherds who generally live among the hills wandering from place to place with their flocks. A few own cows and buffaloes as well as goats, and cultivate some small fields. The men are very strong, sturdy, ignorant, simple, and rough; the women, brave and hardworking, take the milk and butter to market for sale.

Of Fishers and Sailors there were four classes with a strength of 30,994 souls (males 15,222, females 15,772) or 3·29 per cent of the whole Hindu population. Of these 14,703 (males 7004, females 7699) were Gábíts; 8928 (males 4456, females 4472) Khárvis; 3949 (males 2191, females 1758) Kolis; and 3414 (males 1571, females 1843) Bhois. GÁBITS, found from Devgad down to the Goa frontier, are some of them cultivators and labourers, but most are sea-fishers and sailors. The women sell fish on the

Chapter III. Population.

Hindus.
Personal
Servants.

Shepherds.

Fishers.

¹ There is generally one barber for one or more villages which he visits every fortnight and shaves as many persons as he can in the course of the day. The barber is paid in kind. At harvest time he gets a bundle. *bhāra*, of each of the crops. The barber generally attends on well-to-do persons in the *Divāli* festival (October) to rub coconut oil on the bodies of the male members of the house before they bathe. On the next day his wife comes with a burning lamp, *ārti*, and waves it before the chief person of the house who generally gives her 3d. (2 *annas*) or a piece of coloured cloth, *khan*, for a bodice. The barber gets a meal on festivals and holidays, and on thread ceremonies and marriages, a turban. When a boy is shaved for the first time the barber gets a new square piece of cloth, *rumāl*, worth from 2d. to 9d (1½-6 *annas*), a coconut, one pound of rice, and a betelnut. The barber holds the flag, *nishān*, of the village god when the palanquin, *pālkhī*, is taken round the temple.

Chapter III.**Population.****Hindus.****Fishers.**

spot or take them dried for sale in other parts of the district. Though not so important as to the north of Bombay, the curing of fish is carried on to a considerable extent, and the Gábits have some local importance from managing the native craft that still carry the bulk of the coasting goods and passenger traffic. KHÁRVIS are a small class with, besides some about Harnái and Báukot, three villages in the Ratnágiri sub-division, one on the Jaygad river, one on the Purangad creek, and one near Ratnágiri. Sailors and fishers by calling, they also trade and a few cultivate. They are sober, intelligent, trustworthy, and good seamen. Boats manned by Khárvis are always in demand. KOLIS are found on the north coast. The aborigines of the country, they formerly possessed many strongholds, the principal being Kardu near the Devghát, whose Koli chief, styled Rája, held lands both in the Konkan and in the Mával above the Sahyádris. They are a strong hardy race, the men sturdy, thick-set, and many of them very fat, the women well-made and healthy. They live in thatched huts, in villages very dirty, untidy, and full of smells. The men wear a rather high skull cap of red flannel scalloped in front over the nose; generally a waistcoat of flannel or broadcloth, and a very tightly-wound waistband. Except for the cap their full dress does not differ from that of the Kunbis. The women dress like the Kunbis, but more neatly. They eat the cheapest sort of rice and vegetables, but to a great extent live on fish, on their great days killing fowls or a goat or sheep. They are excessively fond of liquor, generally taking a large draught before their evening meal. From the nature of their work they hold a low place among Hindus. Except a few traders and husbandmen all are seamen and fishers, very bold, pushing and skilful, owning their own boats, preparing their own nets, and on the whole independent and well-to-do. They believe strongly in ghosts and spirits, and if they think that the spirits are displeased they kill sheep, goats, or fowls, and scatter pieces of their flesh that the spirits may feed on them. They believe in omens and watch them carefully in starting, fishing or going on a voyage.¹ BUOIS, numbering 3400 souls, are found all over the district. Freshwater fishers, palanquin bearers, melon growers, cultivators, and labourers, they are a quiet, orderly, and hardworking class. In food and dress they do not differ from Maráthás and Kunbis.

Miscellaneous.

Of Labourers and Miscellaneous Workers there were seven classes with a strength of 721 souls (males 374, females 347), or 0·07 per cent of the whole Hindu population. Of these 164 (males 222, females 242) were BERTHS, bamboo and ratan basket and mat makers; 42 (males 22, females 20) BHÁDBHUNJÁS, parchers and sellers of parched grain and pulse; two males, TAMBOIS, betelnut and leaf sellers; 32 (males 23, females 9) RAJPUTS, locally called Deccani Pardeshis, some of them husbandmen, the rest messengers and constables; 18 (males 11, females 7) VADARS, a wild tribe of wandering

¹ Meeting on the road or path to their vessel a woman whose husband is alive, two Bráhmans, or a man with grain or fish are good omens. It is bad to meet a widow, a cat, or a bareheaded Bráhmaṇ,

cutters, hardworking but dissipated, inclined to steal and fond of all animal food especially of field rats. BELDÁRS, numbering 99 souls (males 54, females 45), come in bands of ten to fifteen from the Deccan in the fair season and go back for the rains. Sturdy, dark, and very hardworking, they are, like the Vadars, stone cutters, and like them have very few scruples as to what they eat. RÁMOSHIS, numbering 64 souls (males 40, females 24), are found only in Chiplun, where they are employed as village watchmen. VAIDUS, a tribe of wandering doctors, occasionally come from the Deccan and hawk medicinal herbs, which they are said to collect on the Mirya hill near Ratnágiri. Tall, swarthy, and strong, the men, with hair and beard unshaven, generally move about in small bands of two or more couples. They speak a corrupt Maráthi, and among themselves are said to use a Telugu-like dialect. On reaching a village they put up in some temporary sheds, and dressed in red ochre head-cloths, loose coats, and trousers, move from house to house calling out the names of their medicines.¹ They are also skilled in drawing out guinea worms for which they are paid 6*d.* to 1*s.* (4-8 *annas*).

Chapter III.

Population.

Hindus.

Miscellaneous.

Of Leather Workers there were two classes, with a strength of 10,694 souls (males 5468, females 5226), or 1·13 per cent of the whole Hindu population. Of these 10,572 (males 5400, females 5172) were Chámhbárs, shoemakers, and 122 (males 68, females 54) Jingers, saddlers. CHÁMBHÁRS, found throughout the district, are a hardworking orderly class, rather badly off. Those of Lánja in Rájápur have a local name for their skill in making the sandals, *vahánás*, generally worn by natives in the rainy season. They are one of the castes reckoned impure by other Hindus. Their family priest is a Jangam or Lingáyat. In social estimation the priest does not suffer degradation by ministering to the Chámhbárs. JINGARS make cloth scabbards, saddles, and harness, and also work in wood. They are skilled workers, but of intemperate habits.

Leather
Workers.

Besides Chámhbárs there were three Depressed Castes with a strength of 85,528 souls (males 41,756, females 43,772) or 9·08 per cent of the whole Hindu population. Of these 85,513 (males 41,750, females 43,763) were Mhárs; 12 (males 5, females 7) Mángs; and 3 (male 1, females 2) Bhangis or sweepers. MHÁRS are found all over the district, but are specially common in Dápoli where they own much land. They are of two divisions, Mhár-bele and Mhár-pále. They are a strong and thick-set race, and all over the district affect the name of landholder, *mirási*, as more respectable than Mhár or Dhed. They have no scruples about food and drink, eating all animals, even carcasses, and drinking liquor to excess. Their touch is considered to pollute Hindus, and so strong is the feeling about them, that when a Mhár meets a high caste man the Mhár is expected to leave the road and step to one

Depressed
Castes.

¹ Their chief medicines are *kapt mandur* and *ras-shindur* a factitious cinnabar made of zinc, mercury blue vitriol, and nitre fused together

Chapter III.

Population.

Hindus.
Depressed
Castes.

side, in case his shadow should fall on the man of high caste. Some of them who have risen to high positions in the army are, as pensioners, treated with respect. But as their pension dies with them, none of the families have been permanently raised to any higher position. Most of those who remain in Ratnágiri are village servants and field labourers. Very few of them hold or till land of their own. Of those who leave the district in search of work the bulk come to Bombay as carriers and labourers. Large numbers enter the army and have always proved obedient, hardy, and brave soldiers. From a statement supplied by the Military Authorities it would seem that there are at present 2180 Ratnágiri Mhárs on the rolls of the Bombay army, of whom 1030 are in active service and 1150 pensioners. Except the pensioners who are well-to-do, the Mhárs are poor, many of them in debt to the village headmen and the large landholders. They are a quiet, orderly class, with a good character as soldiers, and, except in Dápoli where their increase has begun to burden the cultivators, they are contented and liked. The Mhárs are a religious class, with a priest of their own whom they call Mare Joshi. Their household gods are Vithoba, Rakhumábái, and others, and they go on pilgrimages to Vithoba's shrine at Pandharpur. MĀNGS are scarcely found in the district. One of them was a cultivator and the rest beggars.

Unsettled
Tribes.

Of Unsettled Tribes there were five, with a strength of 938 souls (males 444, females 494), or 0·09 per cent of the whole Hindu population. Of these 363 (males 171, females 192) were Kátkaris : 485 (males 226, females 259) Thákurs, 57 (males 27, females 30) Dongri Kolis ; 31 (males 18, females 13) Lamáns ; and 2 Bhils (males). KÁTKARIS, or makers of catechu, *kát*, are a wandering tribe, occasionally passing through the district and travelling as far north as Khándesh. They claim to be of the same stock as the Khándesh Bhils, and are one of the most degraded of hill tribes. They know Maráthi, but are said among themselves to use an unintelligible jargon. They are small, active, and very dark, and dirty in their habits, the men wearing the beard and hair long. For clothes the men have seldom more than two pieces of coarse cloth, one wound round the head, the other round the waist ; the women wear a ragged robe almost always without a bodice. They have no scruples in the matter of food, eating animals of all kinds, even monkeys. They hold the very lowest social position. They travel about in gangs of ten to fifteen, armed with formidable bows and arrows, with de akrys, goats, and hunting dogs, generally offering monkeys and parrots for sale, or working as day labourers. If they find no employment they stay only a few days at one place. During the rains they live in the forests, but sometimes work for hire in the fields. They have a bad name for thieving and are generally watched by the police. They reverence the ordinary Hindu gods and believe in ghosts and witchcraft. Low as they are, they are said to be better off, and less utterly savage, than they were fifty years ago. THÁKURS are a wandering tribe found in different parts of the district. They are stouter, fairer, and much less savage-looking than the Kátkaris, and the women though fat and ungainly, have feak kindly

faces. They live in small portable huts. The men wear a cloth wound round the head, a waistcoat, and a small waistcloth: the women a tight-fitting bodice and a robe closely girded round the waist. Some are hunters, labourers, cultivators, and herdsmen, but most are beggars generally going about with bullocks, *nundis*, trained to dance and nod the head. DONGRI or hill KOLIS wander from place to place. They know Marāthi, but are said among themselves to use a strange dialect. They till, fish in rivers, and bring firewood for sale. They are a simple and harmless class. LAMĀNS or VAXĀRIS pass through the district along the trade routes between the coast and the Deccan. Carriers of grain and salt on pack bullocks, they generally pass the rains in the Deccan, and after the early harvest is over, come to the coast. They generally make two trips each fair season. Formerly they were a very large class, but since the opening of hill-passes fit for carts, the demand for their services has in great part ceased.

Devotees and religious beggars of various names, Gosāvis, Jogis, Gondhalis, Bhutes, Bhāts, Saravdes, Gopals, and Jangams numbered 6553 (males 3186, females 3367), or 0·69 per cent of the whole Hindu population. The fame of Ganpatipule in the Ratnāgiri sub-division, Parshurām in Chiplun, and the intermitting spring, *Ganga*, at Unhāle in Rājapur attract many religious beggars. Gosāvis (3313) till land, work as private servants, and when at leisure, go begging, but seldom to any distance from their homes. Recruited from almost all castes, and worshippers of Vishnu and Shiv, they wander in every direction begging and visiting places of pilgrimage. Jōgis are of many kinds. Some foretell events, others act as showmen to curiously formed animals, and a third class are the Kānpḥātes, or slit-eared Jogis, who wear large circular pieces of wood and ivory in their ears. Some marry and others remain single. GONDHALIS, at Marātha, Bhandāri, and Kunbi marriages, are always, on the last night of the festival, called to perform a *gondhal* dance and repeat verses. All the performers are men. They have two musical instruments, a *tutuna* and a *samel*. At the time of the performance, they wear long white coats and their ordinary turbans. They are generally three, one actor and two musicians. BHUTES, followers of the goddess Bhavāni, go about begging with a lighted torch and a *tutuna* in their hands. They have their bodies covered with strings of *kacdi* shells. BHĀTS and Brāhman beggars go begging during the fair season, and generally gather enough to last them the whole year. SARAVDES, a healthy strong-looking class, are found in almost every sub-division. They generally travel in November, buying and selling cows and she-buffaloes. Some of them go begging with their whole families, and return home in April or May. GOPALS sing, dance, leap, and wrestle; their women beg. They keep and deal in cows and buffaloes. JANGAMS act as priests to Lingāyats and cultivate land.

In the proportion of Musalmans, Ratnagiri, with 74,533 souls or about 7·34 per cent of the whole population, stands first of the three Konkan districts. Musalmān are found in large numbers in the

Chapter III.

Population.

Hindus.

Unsettled
Tribes.

Beggars.

Musalmans

Chapter III.**Population.****Musalmán.***Arabs and
Persians.*

northern coast districts, 18,545 in Dápoli and 13,818 in Chiplun; in considerable strength at the old trade centres of Rájápur (11,616), and Sangameshvar (4845); and in very small numbers in the south, 3166 in Devgad and 1741 in Málvan.

As in the other coast districts of Western India, the Ratnágiri Musalmán population has a strong strain of foreign blood, both Arab and Persian. A foreign element probably existed before the time of the prophet Muhammad (570-632).¹ And in the spread of Musalmán power, between the seventh and tenth centuries, as sailors, merchants, and soldiers of fortune, Arabs came to the west coast of India in great numbers.² From the accounts of Sulmán, the earliest Arab traveller, it would seem that about the middle of the ninth century, the Balhárás who ruled the Konkan were very friendly to the Arabs. The people of the country said that if their kings reigned and lived for a long time it was solely due to the favour shown to the Arabs. Among all the kings there was no one so partial to Arabs as the Balhára, and his subjects followed his example.³ Early in the tenth century, Arabs are mentioned as settled in large numbers in the Konkan towns, married to the women of the country, and living under their own laws and religion.⁴ During the fourteenth, fifteenth, and sixteenth centuries, when the lands of Ratnágiri formed part of the possessions of the Bahmani and Bijápur kings, a fresh impulse was given to immigration, both from the increased importance of Dábhól and other places of trade, and from the demand for Arab and Persian soldiers. Even under the Maráthás the services of Arab seamen were still in demand.⁵ No record has been traced of any attempt to force Islám on the people of the district, and from the tolerant character of the Bijápur kings,⁶ it seems probable that, except a few who yielded to the persuasion of missionaries, to the temptation of grants of land, or to the oppression of Aurangzeb, Ratnágiri Musalmáns are not descended from purely Hindu converts.

Konkani.

Besides the Arabs and Persians who from time to time came as soldiers, traders, and sailors, the character of many Musalmán villages near Chiplun and along the shores of the Bánkot creek, point to some more general Arab settlement. These people, the fair Arab-featured Konkani Musalmáns of Bombay, generally known among Musalmáns by the term Kufis, seem, as the name shows, to have come to India from the Euphrates valley, and to

¹ A trace of the early Arab sailors is found in *Jazira*, or the island, the latter part of the name Mehzenagara, apparently applied by Ptolemy (150) and the Pemplos (247) to the town and island of Málvan or Melundi.

² Many high Ratnágiri families, though at present following different professions, are distinguished by Arabic surnames, *Karri*, judge; *Fakih*, lawyer, *Muallam*, professor; *Khatib*, preacher; *Mukhi*, elegy singer, and *Hafiz*, Kurán reciter.

³ Elliot's History, I. 4. The Balhárás were the Ráputts of Malkhet near Haidarábad. Compare Mas'udi's Prairies d'Or, I. 382.

⁴ Mas'udi (913), Prairies d'Or, II. 86.

⁵ In 1683 the Company's merchantman President was, off Sangameshvar, attacked by two ships and four galleys. The crew were Arabs who said they were in Shambháj's pay. Orme's Hist. Frag. 120.

⁶ During the reigns of Yusuf Adilshah (1489-1510) and of Ibráhim Adilshah II. (1590-1626) no man's religion was interfered with. Fenshta, II. 125.

belong to the same wave of Arab settlers who in Gujarát are known as Náiátás, and in Kánara as Naváits. The traditions of the people and the accounts of many Musalmán historians agree that the bulk of them fled to India from the Euphrates valley about the year 700 (82 A.H.) to escape massacre at the hand of the fierce governor Hajjáj bin Yusuf.¹

Besides the regular classification into the four main tribes, Syeds, Shaikhs, Moghals, and Patháns,² Ratnágiri Musalmáns are locally divided into two classes, Jamátis or members of the community, and Dáldis coast fishers, with whom the Jamátis do not intermarry.³ Though JAMÁTIS have much sameness in appearance and manners, there is among them a special class whose head quarters are along the Bánkot creek and on the Dápoli coast. The Bánkot Musalmáns are rather a slim but well made, fair, and good-featured class, the men shaving the head and wearing short rather scanty beards. Their home tongue is Maráthi, but most of them know Urdu. Except a few well-to-do landholders they live in second class houses. Some of the villagers wear a white Bráhman-like turban and the Hindu coat and waistcloth. But as a rule the men wear a high stiff turban of dark cloth, taken, like the Pársi hat, from the head-dress of Surat Vániás, a coat, trousers, and Gujarát shoes.⁴ The women wear the Hindu dress, and when they travel, a large white sheet-like over-robe. Widows dress in white. Landholders, sailors, and some of them servants to Europeans, they are on the whole well-to-do. The calling of boatmen in Bombay harbour has of late greatly suffered from the competition of steam launches; but many find good employment as engineers and workers in machinery. Sunnis of the Sháfai school few know the Kurán or are careful to say their prayers. On every Thursday, either in a mosque, or in a house built for the purpose, the Konkánis meet together, and sing hymns to the praise of God and the Prophet. This done tea is drunk, and sweetmeats distributed. Except that at marriages a dough lamp, filled with clarified butter, is, by the women, lit, carried to a river, pond or well, and left there, and that for five Thursdays after a death, dinners are given to relations and friends, their customs do not differ from those of

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Jamátis.

¹ Details of Hajjáj the 'terror and scourge' of his country are given in Mas'udi's *Prairies d'Or*, V. 193-400. (See also *Khulasat-ul-Akhbar*, and *Tarikh-i-Tabari* in Price's *Muhammadian History*, 455-460). According to the general story these men were at first natives of Madína from which they were driven by the persecution of Hajjáj. In addition to the original body of settlers, it seems probable that fresh immigrants arrived in the tenth century (923-926) to escape the ravages of the Karmatian insurgents who destroyed Basra and Kufa and enslaved part of the people (*D'Herbelot's Bibliothèque Orientale*, I. 509; *Dabistan*, II. 421), and in the thirteenth century (1258) when Halaku Khan the Tartar captured all the cities of the Euphrates valley, put the reigning Khahfah to death, and massacred 160,000 of the inhabitants.

² About $\frac{1}{10}$ are Syeds, $\frac{1}{10}$ Shaikhs, and $\frac{1}{10}$ Moghals and Pathans.

³ Perhaps *dahli* or thrown, in the sense of outcaste.

⁴ All Konkán Musalmáns are said formerly to have dressed like Hindus, and, marrying Hindu wives, to have adopted many Hindu practices. In time under the influence of Musalmán teachers many town families have become more strict in their practice. Villagers still in many cases dress like Hindus, even worshipping *Shitala-Devi*, if their children are attacked by small-pox. Maulvi Syed Ahmad Sahib Gulshanabad:

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Dáldis.

other Musalmáns.¹ They marry only among themselves, marriage with any other caste being considered a disgrace. Of late one or two families have given their daughters to Bombay Arabs. A few of them, some in Bombay and a very small number in Ratnagiri, know English, and teach their children Maráthi and a few English.

DÁLDIS, found chiefly in the Ratnágiri sub-division, have the tradition that their forefathers came in ships from across the seas. Their appearance and position among the Musalmáns of the district would seem to make it probable that they are partly converted Hindus, probably Kolis, and partly the descendants of immigrant Musalmáns and slave girls.² The men are tall, strong, and stoutly built with pleasant but irregular faces; most of the women are swarthy, but a few are fair and well featured. They speak Maráthi in their homes and many understand and speak Hindustáni. Their houses are almost all thatched huts of the second class. Except that a few of the men wear tight trousers, they dress, both men and women, in Hindu fashion. Some are sailors and cultivators, and some go to Bombay in search of work; others make and sell nets and rope of all sorts, and most are fishermen differing little from Hindus in their way of fishing. They hold a low position among the Musalmáns of the district. They are hard-working, and though many are in debt, as a class they are fairly well-to-do. Sunnis in religion they marry only among themselves and obey the Kazi. Very few of them send their children to school.

Most of the rest of the Musalmáns are in appearance somewhat less sturdy and rough-featured than the Dáldis, and darker and not so foreign-looking as the Bānkot men. The home tongue of all is Maráthi, but most of the well-to-do know Urdu. The bulk of them are townspeople living in second class houses, generally on rice and pulse. Most of them are able to afford dry fish, but few, except on holidays eat animal food. The men generally wear a skull cap, the Musalmán coat, and the waist-cloth, only the well-to-do wearing trousers. Their women all dress in Hindu fashion, in the large Maráthi robe and bodice. Neither hardworking nor thrifty, they are orderly, clean, and hospitable. Living chiefly as grain-dealers, cultivators, sailors, constables, and messengers, they are not as a class well-to-do. In religion almost all are Sunnis following the Kázi. Few of them send their children to school; but many children go to the Maulvi to learn the Kurán. Few have risen to high positions.

Pársis.

There are only three families of Pársis, one settled at Dápoli and two at Vengurla. They are Europe shopkeepers and traders with their head quarters in Bombay.

Christians.

Of the 3244 Christians, all, except the European residents, are found in the south of the district. Calling themselves Christis, and

¹ Maulvi Syed Ahmad Shah Gulshanahadi.

² According to Major Jervis (Statistics of Western India, 1845) they are a race of people descended from the first Arabian colonists who settled on the western coast in the seventh or eighth century and come pond with the Máplas of Malabar.

known by the people of the district as Feringis or Portuguese, some of them may have a strain of Portuguese blood, but the bulk are natives converted in mass to Christianity during the time of Portuguese rule. They speak the dialect known as Konkani with more Portuguese words than others use. They are generally dark, healthy, and stout, living in tiled houses with walls stained with some coloured wash. There are few solely Christian settlements, but Málvan, Vengurla, Redi, and other large villages have each a considerable Christian quarter. They differ from the other people of the country in eating rice and wheat instead of *nágli*, and from Musalmáns in eating pork. Both men and women smoke tobacco, and the men are great toddy drinkers, though perhaps not more so than middle class Hindus. Among the men, the well-to-do dress like Europeans, and the poor generally in a jacket and short trousers of coloured cotton and a red cloth cap like that worn by Kolis. The women dress like Hindus, except that they wear a peculiar neck amulet of red stone beads strung together and joined in front by a green coloured stone edged with gold, called *fora*. They are fond of the red and blue checked Belgaum cloth, and, at church, wear a large white robe drawn over the head. They are a quiet, orderly class, hardworking, and, except for their fondness for drink, frugal. Most of them are husbandmen showing great skill in growing vegetables and in breeding pigs, ducks, turkeys, and hens. Some also quarry red stones and sell them to masons who work them into small household vessels. The upper classes are employed in Bombay as clerks and shopmen. Unlike Goa Christians, none take household service with Europeans. As a class they are fairly well-to-do. As was shown by their remaining true to it after the fall of Portuguese power, they are attached to their religion, supporting their priests, keeping their churches¹ in good repair, attending the services, and carefully observing the high days. Though they have all Christian names and surnames they still keep the old distinction of caste, calling themselves Christian Kunbas, Bhandáris, or Kolis, and marrying only among members of their own caste.

Soon after the establishment of British rule (1822), the Scottish Missionary Society resolved on establishing a mission in western India. The first missionary, the Reverend Donald Mitchell, as Bombay was occupied and as he was not allowed to settle at Poona, chose Bántot as the first station, and soon after added Harnái. In the first year there were, under mission superintendence, ten schools in ten villages with an attendance of 135 pupils. This, in 1828, had increased to seventy-nine schools and 3219 pupils, forty schools and 1484 pupils in Bántot and thirty-nine schools and 1735 pupils in Harnái. Of the whole number of pupils 300 were girls. In 1829, as

¹ The Christian churches are almost all plain oblong buildings with a small chancel at the east end, but rarely with a steeple. The larger churches have generally a low square tower at the north-west or south-west corner and the smaller ones a bell turret. All are whitewashed outside and tiled, and in the many of them are gaudy with colour, gilt lantern pictures, and glass chandeliers. The priest's house is generally attached to the chancel and outside of it. At the west, there is always a stone cross raised on steps and covered with the symbols of the passion and with the date of the building or restoration of the church. On the greater festivals during service, the church bells are kept ringing almost without stopping.

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 Christians.

the work of superintending them was found to interfere with vernacular preaching, the schools in the Bānkot district were closed. In 1830 the mission head-quarters were moved to Poona, and in 1834 the Ratnágiri mission was given up. During the ten years of work few converts were made. And when the mission was withdrawn these few went to Bombay.¹ For many years after the Scotch mission was withdrawn no fresh efforts were made to spread Christianity. In 1873 the American Presbyterian Board took up Ratnágiri as a station of the Kolhápur mission. The missionaries teach two schools, one for boys with 134 pupils, the other for girls with fifty-two. Besides those brought as helpers from other districts, there are six native Christians who have been received to Church membership. Of these one was a Roman Catholic, two were Muhammadans, two Maráthás, and one a Mhár. The mission church, built in 1878 at a cost of £321 (Rs. 3210) and called the Hunter Memorial Chapel, is a stone edifice with an audience hall fifty feet by thirty-five.²

Villages.

None of the villages are walled or fenced. Those on the coast are densely shaded by belts of cocoanut gardens, and the roads between the long lines of houses are usually paved with cut laterite stones. These raised causeways are called *pákhúdis*. The village sites of the inland parts are well, though less densely, shaded with mango, jack, and tamarind trees, each house standing in its own yard. Chámhbárs, Mhárs, and other people of low caste live in quarters apart from the main village site. These hamlets, *vádás*, are always as well shaded as the main village. In this district there is one village or town to about every three square miles, each village containing an average of 790 people and about 174 houses.

Except the people of seven towns numbering 64,505 souls, or 6·32 per cent of the entire inhabitants, the population of the Ratnágiri district, according to the 1872 census, lived in 1212 villages, with an average of 768·62 souls to each village. Three towns had more than 10,000, and four more than 5000 inhabitants. Excluding the seven towns and 5114 hamlets, there were 1242 inhabited state and alienated villages, giving an average of 0·32 villages to each square mile. Of the whole number of villages, 104 had less than 200 people; 413 from 200 to 500; 460 from 500 to 1000; 200 from 1000 to 2000; 46 from 2000 to 3000; and 19 from 3000 to 5000.

Houses.

As regards the number of houses, there was, in 1872, a total of 224,790, or on an average 59·32 houses to the square mile, showing, compared with 116,807 in 1846, an increase of 92·44 per cent. Of the total number, 3318 houses, lodging 27,699 persons or 2·72 per cent of the entire population at the rate of 4·15 souls to each house, were buildings with walls of stone or fire-baked bricks and roofs of tile. The remaining 221,472 houses, accommodating 991,437 persons or 97·28 per cent, with a population of 8·35 souls to each house,

¹ Contributed by the Rev. D. Mackiehan, M. A., of the Free Church Mission, Bombay.

² Contributed by the Rev. J. P. Graham of Ratnágiri.

included all buildings covered with thatch or leaves, or whose outer walls were of mud or sun-dried brick. In 1829, though some houses were large and comfortable, each village had, on an average, not more than one brick or stone house. The walls of the better houses were mud, and of the poorer, reed. The roofs were thatched, the better with rice straw and the rest with grass.¹ This state of things is now (1880) found only in the smaller villages and hamlets. All large trading towns and villages have a good number of substantial stone tile-roofed buildings, housing nearly three per cent of the population. The better sort of house, square built, with an open central or front courtyard, has, round the courtyard, an eight feet deep verandah-like dais or platform, raised about three feet from the ground; its walls covered with grotesque bright coloured figures of gods and animals, and its cornices hung with Bombay or China pictures. From this verandah, the common family resort, doors lead into back rooms, mostly dark and windowless, or out into a cattle-yard with offices in the rear. Shopkeepers live in dark rooms behind their stalls, with a backyard for cattle, and offices in the rear entered through a back door. The hovels of the poor, a few feet square with one doorway, generally the sole opening for light or smoke, are divided by bamboo or palm leaf partitions into three or four small rooms into which a family of eight or ten are often crowded.

It² is probable that in early times there was a more or less complete village system. Certain Marátha and Kunbi families were, as appears from ancient deeds, styled *patels*, and ranked as the headmen of their villages. The revenue system was then *kulárí* or *rayatvár*, each cultivator being an independent hereditary holder, who stood assessed at a fixed rental in the public accounts, beyond which nothing could be levied from him. The creation of village renters, *khots*, introduced a new element. The *khots* in course of time acquired hereditary rights by grant or prescription. In a small proportion of the villages, less than a tenth of the whole district, the older holders have succeeded in keeping their rights intact. These are the pure peasant-held, *nival dhárekari*, villages of the north of the district, and the peasant-held, *kulárgi*, villages of the south. In another class of villages, while some of the old peasant-holders continue to keep their lands, the *khots* either by lapses, or spread of tillage, gained rights in the land. These are the mixed, *khichdi*, half rented half peasant-held villages. In many instances the original holders have entirely disappeared, and all the lands are either in the hands of the *khots* themselves, or of tenants who cultivate under them. These are called *nival* or pure *khoti* villages. In all these villages, by their superior power and authority, the *khots* have gradually and entirely replaced the ancient *patels* as headmen of villages. There are in fact at the present time no hereditary *patels* in the district, and were it not for the modern appointments of police

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¹ Lieut. Dowell, 1829. Bom. Rev. Rec. 225 of 1851, 273.

² Contributed by Mr. C. W. Vidal, C. S.

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patels, nominated by Government from among the most intelligent villagers, for life or shorter periods, the very name of *patel* would have been forgotten. Though the *khots* have never been recognised as Government servants, in villages where the survey settlement has been introduced, they are paid a percentage of the assessment collected by them on behalf of Government from the peasant-holders, *dhárkaris*. Elsewhere they receive no direct remuneration either in cash or in land. Except in a very few villages, where there are still hereditary officers styled *mahájans* and *vartaks*, appointed or recognized by former Governments, the *khots* are invariably the headmen of their respective villages. Where there are *mahájans* or *vartaks*, the *khots* yield precedence to them, and the former are entitled to preside at meetings of the villagers. *Khots* are found of many castes, but a large majority are Bráhmans. The earliest *khots* were chosen from a few old influential Marátha families, who peopled the villages at the foot of the Sahyádrí range in the Khed and Chiplun sub-divisions. These Marátha *khots* are distinguished by the title of *mokása khots*,¹ which would seem to imply that they originally held their villages on condition of some military service. The powerful sub-division of Chitpávan Bráhmans holds most villages in Khed, Chiplun, and Dápoli. Further south, in Sangameshvar and Ratnágiri, the Devrukha Bráhmans take the place of the Chitpávans. A few villages in Dápoli are held by the Javal Bráhmans. Here and there Shenvi, Prabhu, and Musalmán *khots* are found, and there are also cases of Kunbi, Gavli, and even Mhár *khots*. In the south the *khot* is usually called the Gávkár. The village headman is always the first to receive the betel leaf, *pún supári*, at the celebration of any public religious ceremony, and until this formality has been observed, the ceremony cannot proceed. His leave has also to be formally asked and granted before, on festive days, the palanquin of the village god can be carried in procession through the village. The precedence granted to the headman on all public and religious occasions does not necessarily extend to social gatherings, although, as a matter of courtesy, the headman when invited to a wedding or feast will be the first to receive the *pún supári*. When an event of any importance, such as a wedding, happens in his own family, the headman is expected to entertain the village. On such occasions he gives cooked food to guests of his own and lower castes, and the guests of each caste eat separately. When the host is of low caste, he can either employ a cook of the highest caste, from whose hands all the guests will eat, or else he can give the raw materials for the feast to all the guests of higher caste than himself. When his circumstances allow, the *khot* secures the monopoly of the village moneylending and grain-dealing business. His position gives him a great advantage over professional usurers such as Márvádis who, as a consequence, have little inducement to settle in the district. Though some are rich, a great many of the hereditary *khots* are more or less involved in debt, and have been compelled to mortgage their estates to capitalists, who

¹ *Mokasa* was a part of the *cánuh* granted to Marátha officers by Shiváji in payment for military service.

in turn act as moneylenders. As might be expected, the hereditary *khots* are, as moneylenders, more lenient than the mortgagees, who, having no permanent interest in the villagers, strive to make as much as possible out of them during their temporary management. Still the opposition of cultivators to unpopular moneylenders seldom takes the form of active resentment.

Compared with the Deccan, the number of village servants that hold service land, or receive cash from the state, is very small. The village establishments are more or less complete; but the remuneration of the office bearers is for the most part left to the community. This is probably the result of the introduction of the *khoti* system. The Government having interposed a middleman between itself and the cultivators, as a rule, saw no necessity for dealing directly with the inferior village servants. The chief exception to this rule is the case of the village accountants, *kulkarnis*, who, being hereditary holders, *vatandárs*, with grants for the most part older than the introduction of the *khots*, have been allowed to keep their cash allowances in the few villages where the *vatans* exist. The *Mhárs* or village watchmen were also, in consideration of their useful and necessary services, granted small cash allowances in a few villages in the Rájápur, Málvan, and Devgad sub-divisions. A few instances also occur of lands or allowances being paid to special village officers, such as the *mahájan*, the *vartak*, the *mukádam*, and the *desái*. It frequently happens that these offices, the number of which is very small indeed, are united to the *khotship*. In some villages also, where there are no *Mhárs*, the temple attendant, *ghádi* or *gurav*, receives an allowance for performing menial services in the village. In the Sangameshvar sub-division, there are two instances of service lands being held by *shetiás*, and there is a solitary instance in the Málvan sub-division of an allowance being granted to the village astrologer, *joshi*. In some cases too, allowances would seem to have been granted to certain servants on the representations of *khots*, and as a mark of favour to the latter. Such are the appointments of the messengers, *sipáis*, of the Málvan sub-division. The organization of the village establishments differs little in different parts of the district; but the full staff of office bearers is found only in the more populous villages.

Village servants may be divided into three classes: those rendering service to the state; those useful to the villagers; and those whose services are not required either by Government or by the villagers. In the first class are the headman, *khot* or *gávkar*; the police head, *patel*; the accountant, *kulkarni*; the watchman, *mhar*; the messenger, *sipái*; and, where he performs other than temple service, the temple ministrant, *gurav* or *ghádi*. In the absence of an independent *mahájan* or *vartak* the *khot*, as already stated, is the headman of the village. Frequently these latter offices are united to that of the *khot*, as also are those of the *desái* and *mukadam*. The *khot* from his position enjoys many privileges. In former times he was allowed by custom, as part of their rental, to exact without payment one day's labour in eight from all cultivators in his village, except hereditary holders, *ahutkars*.

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When this forced labour was agricultural, it was styled plough service, *nángar et*. When the labour exacted was of any other description, such as carrying grain to market, or carrying the *khot's* palanquin, it was called labour service, *et bigár*. Forced labour of this description has now been abolished, but so patient and submissive are the villagers, that it may be doubted whether the system is entirely dead. The police *patels*, not being hereditary officers, are selected for life or shorter periods from the most eligible candidates. Influential Maráthás are usually chosen in preference to members of the *khot* families. In the settled sub-divisions, the police *patels* are paid by cash allowances fixed according to the population and importance of the villages. These allowances vary from 8s. to £4 8s. (Rs. 4-44) a year. Where the survey settlement has not been introduced, the post is purely honorary. Hereditary village accountants, *kulkarnis*, are found only in a few villages in the Dápoli, Chiplun, Sangameshvar, Ratnágiri, Rájápur, Devgad, and Málvan sub-divisions. The creation of *khots* has, in nearly every instance, rendered their services superfluous. The *kulkarnis* belong mostly to the Bráhmaṇ, Prabhu, and Shenvi castes. They are paid by cash allowances, the only exception being Áchra in the Málvan sub-division, where lands have been assigned for this service.

Except in a few of the coast villages, Mhárs are found throughout the district. They perform various useful services, acting as village messengers and scavengers, and except in Chiplun, where alone there are Rámosis, as village watchmen. They help both the *khot* and the police *patel*, and attend to the wants of travellers. The Mhár families are usually of very old standing, and are not without some influence. If of longer standing in the village than the *khot*, they are called *vatandárs* and *mirásis*. In Málvi in the Dápoli sub-division, the Mhárs have a Persian copper plate grant of considerable age. The *vataudár* Mhárs were all originally independent landholders, and being exceedingly jealous of their rights, have systematically and, in many cases, successfully withstood the *khots'* attempts to rackrent them. For their services to the state they receive, in the surveyed sub-divisions, cash allowances varying from 4s. to £2 4s. (Rs. 2-22) according to a scale fixed in proportion to the population of the village. In the unsurveyed sub-divisions, except in fifteen villages in Rájápur, sixteen in Devgad, and fourteen in Málvan, they receive no state remuneration. Nowhere, except in the Chiplun sub-division, have any service lands been assigned to Mhárs. The village messenger, *sipái*, is found only in the Málvan sub-division. The *gurar*, as he is called in the north, and *ghúdi*, in the south, is usually a Marátha or Kunbi, whose chief duty is connected with the village temple. In a few villages in the south, he performs general village service like that performed elsewhere by Mhárs, and in these cases is considered a useful servant to Government and paid by the state. In some cases the allowances for this office are paid to the *khot* himself.

The second class of village servants, who, though they render no service to the state, are useful to the villagers, includes (1) the

priest, *joshi*, *upádhiā*, or *bhat*; (2) the temple minister, *gurav* or *ghādi*; (3) the Lingáyat priest, *janqam*; (4) the carpenter, *sutár*; (5) the blacksmith, *lohár*; (6) the shoemaker, *chámhár*; (7) the potter, *kumbhár*; and where there is a Musalmán population, (8) the judge, *kázi*; (9) the priest, *mulla*; (10) the beadle, *mujávar*; and (11) the preacher, *khatib*. The priest, *joshi*, *upádhiā*, or *bhat*, also sometimes styled the Sanskrit scholar, *shástri*, or the religious head, *dharmaadhikári*, is the chief Hindu religious officer. He officiates at thread, *jánve*, investments, and at marriage and death ceremonies. It is also his business to name lucky days, and, if required, to cast nativities. The village priest has no vested right to perform any particular ceremony, and the parties are free to employ any eligible person, resident either in or out of the village. The *joshis* are paid by fees, varying according to the wealth of their employers; they usually supplement their incomes by begging. Only one man of this class, a Málvan *joshi*, who, exclusive of quit-rent, *juli*, receives £3 6s. (Rs. 33) a year, is paid by the state. The business of the temple ministrant, *gurav* or *ghādi*, found in almost every village, is to attend at the village temple, to clean the ornaments and minister to the wants of the idol. He also prepares the leaves, *patricalis*, used on feast days as plates, and at stated intervals plays the trumpet in front of the village temple. The Lingáyat priest, *janqam*, is found only in a very few villages, where are settlements of Lingáyat Vánis. There is no instance of a *janqam* receiving state remuneration. The carpenter, *sutár*, and blacksmith, *lohár*, are of the same caste, eating together and intermarrying. The carpenter, found in all but the very smallest villages, holds neither land nor allowances, and is supported entirely by fees for work performed for the villagers. Except that he is found only in the more populous villages, the position of the blacksmith is the same as that of the carpenter. The potter, *kumbhár*, and the shoemaker, *chámhár*, sometimes paid in grain and sometimes in cash, suffer little from competition. If they can get their work done at home, villagers seldom employ outside workmen. In villages with a Muhammadan population, the establishment usually includes a *kázi*, who is the religious and temporal head of the Musalmán community, settling all disputes, and exercising a general superintendence over his followers. He also solemnizes marriages and keeps the registers. The *kázi* is not necessarily a village officer. He is usually appointed to a large district, and may reside anywhere within the limits of his authority. Next in importance to the *kázi* is the *mulla*, who acts as a deputy of the *kázi*, and has charge of the mosques and burial grounds. The *mujávar* is the servant who cleans and sweeps the mosques and shrines, and the *khatib* is the public preacher. None of these Muhammadan officials are paid by the state, nor is it, as in the Deccan, the custom for Hindus to employ Musalmán office-bearers to slaughter their sacrificial sheep and goats. This work is in Ratnágiri performed by the *gurav*.

The third class of village servants includes all not directly useful either to Government or to the villagers. These are: (1) the trade superintendent, *maháján*; (2) the overman, *varlak*; (3) the headman,

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mukádam ; (4) the revenue superintendent, *desái* ; (5) the goldsmith, *sonár* ; (6) the washerman, *parit* ; (7) the barber, *nhávi* ; (8) the tailor, *shimpi* ; (9) the oilman, *teli* ; (10) the assayer, *potdár* ; (11) the superintendent of weights and measures, *shetia* ; (12) the coppersmith, *kásár* ; (13) the cotton cleaner, *pinjári* ; and (14) the betel leaf dealer, *tamboli*. Of the above, the *mahájans*, *vartaks*, *mukádams*, *desáis*, *potdárs*, and *shetiás* are usually hereditary holders, *rataudárs*, under regular deeds. The summary settlement has been applied to their allowances and lands, except where they are held by village *khots*. Although included in the village staff, none of the remaining servants hold service lands or receive allowances. All are paid by customary fees.

Villagers.

The village population usually includes families of more than one caste. A few Rājāpur villages are all of one caste, peopled some by Maráthás, others by Kunbis, and others by Musalmāns. No distinct and separate settlements of aboriginal tribes are found. The whole body of villagers hold few rights in common. There are no common pasture lands, except in one or two villages held directly by the state where lands have been set apart for grazing. In such cases no restriction is laid on the number of cattle any individual may graze. Everywhere else the people graze their cattle in their own fields. There are no common forests. Here and there beautiful temple groves are carefully preserved, and save for the temple, no cutting of timber or branches is allowed. The people obtain what fuel they consume from trees standing in their own fields. The water of the village ponds and wells is free to all, except Mhárs, Chámhbhárs, and other low castes. But many villages have separate wells and ponds for low caste people. The villagers have no fixed system of distributing the cost of any charitable or useful works undertaken by the community. Heads of families are expected to contribute according to their means, paying so much in cash, or supplying so many days' labour. Large landholders and influential persons are expected to entertain the whole village on the celebration of marriages and other important domestic events. Guests are also invited from neighbouring villages ; but on such occasions, ordinary cultivators, artisans, and petty shopkeepers are not expected to do more than entertain a few of their own relations and caste fellows. At death ceremonies it is not usual to entertain guests of a different caste to the master of the house. As distinguished from old cultivators, *ratandárs*, new settlers are called *bádhkaris*, or cultivators of waste-land, *bádhén*. The same name, though for this the correct term is *dabandis*, is also applied to persons living in one village and cultivating land in another. Settlements of *bádhkaris* are found in nearly every *thoti* village. In former times movements of cultivators from one village to another were very frequent, and the competition amongst the *khots* to attract settlers was very keen. If satisfied with the terms offered them, the new comers became permanent settlers, and intermarried with the older cultivators. If dissatisfied, they moved to other villages in quest of more favourable terms. In some villages all the cultivators belong to this class, and through many generations keep the name of *bádhkaris*, even where they have acquired permanent

occupancy rights. In all communal matters, the *bádhekars* enjoy equal rights and privileges with the older cultivators, and are not now liable to pay any special fees for the privilege of belonging to the village. The changes that have taken place under British rule have left their mark on the village communities. Disputes are now rarely referred to the village councils, and the headman is seldom called on to give his advice on doubtful questions. The gradual spread of education, their better knowledge of law and procedure, improved communications, and new markets, have made the cultivators more self-reliant and independent.

The pressure of population is relieved by the readiness with which the people leave their homes in search of work. The better class of Christians and Bráhmans find openings as clerks, and in the civil branches of Government service; Musalmáns, Maráthás, and Mhárs are such favourite and willing recruits, that Ratnágiri is the nursery of the Bombay army, and to a large extent of its police, and from Ratnágiri the labour market of the city of Bombay is in great measure supplied. Three large classes of workers go to Bombay from Ratnágiri. Yearly, when the rice harvest is over, bands of husbandmen and field labourers, numbering altogether not less than 100,000 souls, find their way, some on foot, others by sea, to Bombay, and working there during the fair season, return to their fields in time for the rice sowing. The second class, almost all Mhárs, take service as municipal street sweepers, keeping their places for years, but every season arranging for a short holiday to carry their savings to their Ratnágiri homes. The third and most important class are the mill-workers who belong to two divisions, Bánkotis from the north and Málvanis from the south. These people settle in Bombay, the northerners and southerners generally keeping separate, working in different mills. Though wages have by competition and dull trade greatly fallen, as all the members can find work, every family still earns a large sum. With little comfort in their crowded houses, they are well fed and well clothed, and save large sums which they generally take to Ratnágiri, spending much on their marriages and other family events, but investing a part in ornaments and in buying land. Besides these movements to Bombay, a considerable, and with improved communications, an increasing number of Musalmáns, Kunbis, and Mhárs go for work to Aden and the Mauritius. Sometimes whole families emigrate, but as a rule the greater number are young men. All of them leave, meaning to come back when they have made some money, and except those who die abroad, all come back after serving from five to twenty years. Men never settle abroad or bring home foreign wives. When away most of them keep up a correspondence with their families. In Aden they work as labourers and in the Mauritius in the sugarcane and potato fields. Their savings, sometimes as much as £50 (Rs. 500) and generally about £20 (Rs. 200), are brought back in cash or in ornaments. Though their health does not seem to suffer from the change of climate, men never pay a second visit to Aden or the Mauritius.

Chapter III.

Population.

Communities.

Villagers.

Movements of the People.

CHAPTER IV.

AGRICULTURE.

Chapter IV.
Agriculture.Soil.
Rice.

AGRICULTURE, the most important industry of the district, supports 743,217 persons or 72·92 per cent of the population.¹

There are four chief soils : rice ; garden ; alluvial, *rabi* ; and upland, *varkas*.² Each of these main classes includes several varieties. Of rice land the chief sorts are : *mali*, *pánthal*, *kudyát*, *pulanvat*, *bául* or *khári*, and *khárvat*. *Mali* lands are the open tracts in the bottoms of valleys. Where the surrounding rocks are laterite, the *mali* soil containing much iron clay is stiff and hard to plough. The colour varies from yellowish red to dark brown. Inland, near the trap of the Sahyádrí hills, the *mali* is much softer, deeper, and darker. This is the richest soil in the district, and generally holds moisture enough for a second unwatered crop. *Pánthal* soil is found in low-lying lands, where during the rainy season water lies deep. Its rainy weather rice crop is coarse, and often harmed by too much wet. Fields of this soil yield a second crop without watering. *Kudyát*, or terraced land, the rice soil on the slopes and at the foot of hills, with more gravel and less clay, is poorer than *mali*. *Pulanvat*, or sandy soil, is found only on the coast and along estuaries. It has always more sand than earth and in many places is almost pure sand. Barren in ordinary or irregular seasons, with a heavy and steady rainfall, it yields good crops. *Bául*, or *khári*, is the name given to the soil in the hollows on the tops of the flat laterite hills near the coast. It is found in small patches of seldom more than a few acres, and is generally surrounded by bare sheet rock. Extremely fine, crumbling to dust on being ploughed, it is seldom more than a few inches deep. *Khárvat*, or salt, is rice land near the coast and on the banks of tidal creeks. Most of it is reclaimed from the sea by earth or masonry dams. Always more or less charged with salt, it grows only a coarse red rice.

Garden.

Garden, *bágáyat*, lands are chiefly plantations of cocoanut and betelnut. There are two sorts of garden land, the one known as *ágri* or *astágrí*, or salt, the other as *dongri* or hill *bágáyat*. *Ágri*

¹ This total 743,217 is made up of the following items—(1) adult males engaged in agriculture as per census of 1872, 226,254 ; (2) their wives calculated on the basis of the proportion of the female to the male population, 260,616 ; (3) their children calculated on a similar basis, 256,347, total 743,217. This calculation is necessary, as the census returns show a total of 224,468 under the special head adult agricultural females, and contain no separate figures for the children of agriculturists.

² *Varkas* strictly refers to the crops grown on hill lands and means coarse inferior grains.

bágáyat is always found on the coast or on the banks of tidal rivers, where the soil is sandy. The cocoa palm flourishes in this soil, bearing in eight or ten years and not requiring water after the fifth. The lands usually chosen for *dongri*, or hill, *bágáyat* are well watered spots on the lower slopes of valleys. *Rabi*, the alluvial soil near the banks of rivers, is usually very deep and fine. It yields crops of pulse *tur*, sugarcane, and hemp, and in the south, with the help of water, an additional hot weather crop of *náchni*, Eleusine coracana.

Varkas soils are the uplands, generally light and poor, where the cheaper and coarser grains, *náchai*, *vari*, and *harik* are grown. The rotation of crops in *varkas* lands is *harik*. *Paspalum scrobiculatum*, in the first year; *vari*, *Panicum miliare*, in the second; and *til*, *Sesamum indicum*, in the third. After the third crop the land is allowed to lie fallow for seven years.¹ There are two sorts of *varkas* land, one known as *bhátli* or *mál*, level parts where the plough can be used, the other *dongri* or hill land, the steeper slopes tilled by the hand. In coast villages, where fish manure is used, much of the *bhátli* land bears for five or six years in succession, and then only requires a fallow of one or two years. Hill, *dongri*, land is usually cultivated for three or four years, and then, according to the situation and quality of the soil, lies fallow from three to twelve years. The untilled land yields grass and brushwood which is burnt for manure.

As the revenue survey has been introduced into 774 of the 1337 Ratnágiri villages, there are no available details of the area of the different classes of soil.

Irrigation is chiefly from wells and water courses, *páts*. The tidal wave passes so far inland that the large rivers are useless for irrigation. There are no canals, and, except in Málvan, no ponds² or reservoirs large enough to be used in watering the fields. The chief irrigated crops are rice, sugarcane, and garden produce. In 1877-78, of 1,020,836 acres the total area under tillage, 11,975 acres or 1·17 per cent were irrigated. Of the irrigated land 5793 acres were under rice.

The plough is small and light, easily drawn by one pair of bullocks or buffaloes, well suited to the tiny patches of rice land so common all over the district. The area an average pair of bullocks can plough is, in rice land, about two, and in both alluvial, *rabi*, and hill, *varkas*, lands about four acres. Betel and cocoanut gardens are not ploughed.

The 1878-79 returns show 101,276 distinct holdings, *khátás*, with an average area of ten acres. Of the whole number 57,914 were holdings of not more than five acres; 16,030 of not more than ten acres; 14,989 of not more than twenty acres; 9,327 of not more than fifty acres; 2069 of not more than 100 acres; 680 of not more than 200 acres; 143 of not more than 300 acres; 52 of not more than 400 acres; 27 of not more than 500 acres; 28 of not more than 750 acres; 6 of not more than 1000 acres; 6 of not more than 1500 acres; 3 of not more than 2000 acres; and 2 above 2000 acres.

Chapter IV. Agriculture.

Soil.

Hill.

Arable Area.

Irrigation.

'A Plough
of Land.'

Holdings.

¹ Collector to Government, 31st December 1822.

² Details of the chief Malvan ponds are given above, p. 11.

Chapter IV.

Agriculture.

Stock.

The agricultural stock in Government, *khálsa*, villages amounted, according to the 1878-79 returns, to 93,690 ploughs, 753 carts, 187,466 bullocks, 133,215 cows, 67,379 buffaloes, 403 horses, 46,841 sheep and goats, and 5 asses.

Crops.

As the details of processes, crops, and cost of tillage, given in the general chapter on the agriculture of the Konkan, apply to Ratnagiri, only a few points of local importance are noticed in this place. Of 1,110,280 acres¹ the total area of arable land, 1,020,836 acres, or 91·94 per cent, were in the year 1877-78 under tillage. Of the 1,020,836² acres under tillage, grain crops occupied 949,142, or 92·97 per cent, of which 113,797 were under rice, *bhát*, *Oryza sativa*; 15 under Indian millet, *páta*, *Panicum italicum*; 273,673 under thick-spiked eleusine, *ujáli* or *níchni*, *Eleusine coracana*; 167,950 under cheenna, *vari*, *Panicum miliare*; 352,927 under *harik*, *Paspalum scrobiculatum*; and 10,780 under miscellaneous cereals. Pulses occupied 25,721 acres or 2·52 per cent, of which 1579 were under grain, *chana*, *Cicer arietinum*; 5379 under *tur*, *Cajanus indicus*; 6251 under horse gram, *kolith*, *Dolichos uniflorus*; 3040 under green gram, *muga*, *Phaseolus radiatus*; 5240 under black gram, *udid*, *Phaseolus mungo*; and 1232 under miscellaneous pulses, comprising *páta* *Dolichos lablab*, *kadra* *Dolichos spicatus*, and *charli* *Dolichos catjang*. Oil seeds occupied 25,360 acres, or 2·48 per cent, of which 25,337 were under gingelly seed, *tíl*, *Sesamum indicum*; and 23 under other oil seeds details of which are not available. Fibres occupied 5696 acres, or 0·55 per cent, of which 683 were under hemp, *ambádi*, *Hibiscus cannabinus*; and 5013 under *san*, or Bombay hemp, *táy*, *Crotalaria juncea*. Miscellaneous crops occupied 14,917 acres or 1·40 per cent, of which 1574 were under sugarcane, *us*, *Saccharum officinarum*; 962 under chillies, *mirchi*, *Capsicum annum*; and 11,771 under miscellaneous vegetables and fruits.

Harik.

The following are the chief details of the more important crops. *Harik*, *Paspalum scrobiculatum*, holds the first place, with, in 1877-78, 352,927 acres or 34·57 per cent of the total area under tillage. One of the coarser grains, *harik* grows in uplands, either flat or on steep hill-slopes, where, according to the general practice, *harik* follows *vari* and is followed by *tíl*. In growing *harik*, about a fortnight after the rains set in (June 20-30), the ground is four times ploughed, and the seed sown broadcast. The crop, after one hand weeding, ripens about the end of October or the beginning of November. The cheapest grain in the district, though never touched by the well-to-do, *harik* forms the common food of the poorest classes. It has an unpleasant narcotic property which, though to some extent neutralized by steeping in cowdung and water, causes sickness in those not used to it. So unwholesome, even deadly is it,³ in large quantities, that great care is taken to

¹ As the whole district has not been surveyed, these figures are little more than estimates.

² Of 1,020,836 acres, 16,308 acres were twice cropped.

³ Some Vagher convicts who broke out of the Ratnagiri district jail in 1868 were overtaken and recaptured by the police when in a state of semi-insensibility brought on by eating raw *harik*.

keep cattle from straying into a *harik* field. *Náchni*, Eleusine coracana, holds the second place with, in 1877-78, 273,246 acres or 26·76 per cent of the whole area under tillage. The head-quarters of *náchni* tillage are the sub-divisions of Ratnágiri, Chiplun, Khed, and Dápoli. The chief produce of poor uplands, it is always grown as the first crop after the land has been refreshed by three or more seasons of fallow, and strengthened by a dressing of burnt cowdung and wood ashes. It is also, by the help of water, grown as a dry weather crop in alluvial, *rahi*, land when it is called *gimvas*. There are about twelve sorts of *náchni*, half of them early, *halva*, ripening in September; the rest late, *garva*, ripening about the end of October. Dearer than *harik* and cheaper than rice or millet, *náchni* is the common food of the poor.

Vari, *Panicum miliare*, holds the third place with, in 1877-78, 167,950 acres or 16·45 per cent of the total area under tillage. *Vari*, of which there are two kinds, is always grown in the rainy season on level soils, after and in the same way as *náchni*. Commonly eaten by the poorer classes, it is dearer than *harik* and cheaper than *náchni*.

Rice, *blít*, *Oryza sativa*, holds the fourth place with, in 1877-78, 143,797 acres or 14·08 per cent of the whole area under tillage. There are three modes of growing rice as a rainy season crop. The first and commonest by transplanting seedlings, the second by sowing sprouted seed, and the third by sowing dry seed broadcast. Dry weather rice crops, called *rángan*, are grown by watering fields which have yielded a rainy weather crop. The places chosen for a dry weather rice crop are generally hill side terraces well supplied with water. Land tilled in this way often yields a large outturn, but as it is already exhausted by the rainy season crop, before the rice is sown it wants heavy manuring and careful ploughing. The *rángan* rice crop ripens about the end of March. Of fifty varieties of rice,¹ about forty, ripening in September, are called early, *halva*; the rest, ripening towards the end of October, are called late, *nachán* or *garva*. These varieties of rice differ much in value, the late sorts being generally the best. Their prices, in ordinary seasons, vary from $\frac{1}{2}d.$ to $1\frac{1}{4}d.$ a pound (Rs. 35 - 48) a *khandi*. Rice is the common food of the well-to-do, and is eaten by the poor on marriage and other special occasions. It is used in the manufacture of ink and by washermen in making starch. Rice spirits are sometimes distilled, but from the cheapness of palm liquor are in little demand.

Of Pulses known collectively as *kaddan* the chief kinds are horse gram, *kulith*, *Dolichos uniflorus*, grown in all parts of the district except Khed and especially common in Málvan and

Chapter IV. Agriculture.

Crops.
Náchni.

Vari.

Rice.

Pulses.

¹ Their names are *patni*, *paarel*, *valya*, *varnqal*, *chumansal*, *tambsal*, *kálsal*, *vankál*, *tarsal*, *púsal*, *vápsal*, *lavasal*, *sál*, *patni*, *ambemohar*, *nurpuni*, *mánjarval*, *kudya*, *kuthabir*, *devalvaregal*, *gagel*, *sandham*, *khadus*, *hala*, *mundga pandra*, *damga*, *dodak*, *archut*, *harlut*, *ghodhya*, *kolumbha*, *kaniata*, *eklobhya*, *sorti*, *kushale* or *karnqute*, *sonphul*, *sarvati*, *khochan*, *nanan*, *sitgal*, *takla*, *turga*, *halipatni*, *kudalpatni*, *khárl*, *motryál*, *mundga-tumbada*, *kamed*, *ghatral*, and *valchi*.

Chapter IV. Agriculture.

Crops.
Pulses.

Devgad. In 1877-78, 6251 acres or 0·61 per cent of the tilled area was under *kulith*. Sown in November, after the rice crops are housed, it ripens early in March. *Kulith* flour is used as *dāl*, and the seeds, when boiled and mixed with gram, make very good food for horses. Its stalks are used as fodder. *Tur*, *Cajanus indicus*, largely grown in the north of the district on the banks of the Chiplun and Khed rivers, is not found in any quantity south of Ratnágiri. In 1877-78, 5379 acres or 0·52 per cent of the tilled area were under *tur*. It grows both as a rainy weather, and in the better class of rice fields as a dry weather crop. The rainy weather *tur* is sown in July and ripens in November; the dry weather *tur* is sown in September and ripens in February. The green pods are used as a vegetable, and the dried beans are split and eaten with rice. The dried stalks yield excellent charcoal for gunpowder. Black gram, *uḍid*, *Phaseolus mungo*, is grown all over the district. In 1877-78, 5240 acres or 0·51 per cent of the tilled area were under *uḍid*. It is sometimes sown among standing rice and left to grow after the rice-crop has been reaped. It ripens about March. Green gram, *mug*, *Phaseolus radiatus*, grown all over the district, is most common in Chiplun. In 1877-78, 3040 acres or 0·29 per cent of the tilled area were under *mug*. There are two crops of green gram in the year, an early or rainy weather crop sown in July and ripening in September, and a late or cold weather crop sown in December and ripening in the beginning of March. As a cold weather crop, it is grown in damp fields and as a rainy weather crop in sandy soils. Gram, *harbhare*, *Cicer arctinum*, with 1579 acres, is grown chiefly in Chiplun. It is sown in November and ripens in March. *Púrta*, *Dolichos lablab*, is also an important crop.

Oil Seeds.

Til, *Sesamum indicum*, chiefly grown in Dápoli, bad, in 1877-78, 25,337 acres or 2·43 per cent of the tilled area. It is of two kinds, black-seeded and white-seeded. Black-seeded *til*, which generally follows *harbhare*, and sometimes, though with a smaller return, *náchal* or *rari*, grows best on tolerably flat land. No manure is used, but after two ploughings, from the middle to the end of June, it is sown broadcast. The seed yields generously oil used both in cooking and as a medicine. The white-seeded *til* is grown in the same way. The seed forms part of many sweetmeats, and yields an oil used in cooking. The percentage of oil in the seeds is not so large as in the black-seeded variety.

Sugarcane.

Sugarcane, 1574 acres, is grown in all parts of the district except in Khed. It is planted in February and March and is ready to cut in January. Mauritius sugarcane, introduced many years ago, is still cultivated in some places, but a small red variety is preferred.¹ The

¹ In 1834 about 5000 Mauritius canes were brought to Ratnágiri, but from their indifference and dislike of anything new, the people refused to plant them. (Collector to the Rev. Com. 14th September 1834). About 4000 given free of charge in the village of Mirya two miles from Ratnágiri, produced 11,000 superior canes. A large number of these were again distributed, (Collector to the Rev. Com. 7th September 1835). As they yielded three as much juice as the ordinary one they soon rose in public esteem, and Government to further its cultivation granted remissions of rents on fields destroyed by jackals, ants, or blights. (Government to the Rev. Com. 25th October 1835). In 1837 the sowers of cane in Mirya refused to use the Mauritius variety. In

sugar-making process is simple. Some men cut the cane, others feed a coarse mill that squeezes out the juice, and others boil the juice in a large caldron, in which, without refining, it is allowed to harden. The raw sugar is much used by the people of the district.

Chillies are, by the help of water, grown in considerable quantities as a dry weather crop. Sown in November or December, the pods begin to ripen about the end of February and the plants, if well watered, yield for several months.

Tāj, hemp, *Crotalaria juncea*, is grown to a considerable extent;¹ the rainy weather crop is sown in July and ripens about the end of October. The dry weather crop is sown in rice soils about November and ripens about March. It is used chiefly for making fishing nets, twine, ropes, gunny bags, and paper.

Cotton, *kápus*, *Gossypium herbaceum*, is not grown in the district. The soil, a poor stiff clay, is ill suited to its growth. Up to 1818, when some experiments were begun with exotic cotton, except a few plants of the Konkani or naturalized Bourbon, for domestic use, no cotton was grown in Ratnágiri.² The 1818 experiments, though at first hopeful, were in the end disappointing. In 1833 the high price paid for Sea Island cotton led the Revenue Commissioner Mr. Williamson to try to grow it in the flats near the Málvan salt pans. The experiments were renewed soon after by the Collector Mr. Elphinston in his own garden with the Sea Island, New Orleans, and Konkani varieties. The land was richly manured, and the plants grew freely. Samples were sent to the Bombay Chamber of Commerce and to London brokers. Favourable opinions expressed by both encouraged Mr. Elphinston to continue in 1840-41 the cultivation of the Sea Island and Bourbon varieties. The samples sent were said to be equal to those of the previous year, and experiments on a larger scale were advised. But as Mr. Elphinston had supplied no details of the cost of cultivation, and as he admitted that it far exceeded the price realized, Government did not think it advisable to undertake experiments on a large scale. In 1841 they placed twelve barrels of New Orleans seed at Mr.

Chapter IV. Agriculture.

Crops.

Chillies.

Hemp.

Cotton.

1839 the sugarcane crop was destroyed by ants and jackals, except in Mirya whence others obtained large supplies. (Collector to the Rev. Com. 29th February 1840). In 1856 its cultivation was confined to a few coast villages.

¹ In 1835 the cultivators, fearing a rise in the assessment on hemp grown on unassessed lands, discouraged its cultivation. (Collector to the Revenue Commissioner, 7th September 1835). Government accordingly granted twenty-five year leases and promised remissions. (Government to the Revenue Commissioner, 21st April 1836). In 1836 Ratnágiri ropes were in much demand for the Bombay shipping. (Revenue Commissioner to Government, 1st April 1836). The highest assessment was reduced from £1 2s. to 10s. (Rs. 11-5) a *bagh*. (Government Resolution, 29th September 1836). In 1839 the precarious nature of the crop, the dislike of the people to hemp because it was used in fishing nets, the poverty of the cultivators and the opposition of the *khors* were the chief checks to hemp being generally grown. (Assistant Collector to Collector, 8th August 1839).

² Dr. Hove (December 1788) found up the Bankot creek cotton of the yellow sort growing very freely. It had just begun to bud and promised a plentiful harvest. It was planted both with rice and pulse and with wheat. Tours, 191, 192. On the other hand Forbes writing about the same time makes no mention of cotton. Or. Mem. I. 107, 122. It seems possible that Dr. Hove mistook the hemp plant, *ambach*, *Hibiscus cannabinus*, for cotton.

Chapter IV.
Agriculture.

Crops.
Cotton.

Elphinston's disposal, but failing to induce the people to take the seed, he sent back eleven barrels and kept one for his own use. The plants sprang up, but rain destroyed most of them and the rest yielded a very scanty crop. In 1840-41 he still further extended the cultivation of these exotic varieties. Konkani, or Bourbon, cotton was pronounced to be more useful than the Sea Island, as the Sea Island was used only for the finer yarns, and its consumption was comparatively limited. Returns of the cost of cultivation in 1840-41 and 1841-42 showed a loss in the first year more than covered by the profit in the second. The acre yield was thrice as much as at Broach and Kaira. On the recommendation of the Bombay Chamber of Commerce, Government placed a sum of £1000 (Rs. 10,900) at Mr. Elphinston's disposal. In 1843-44, 275 acres and in the next year 342 acres were cultivated, but the experiment was a decided failure, most of the seed planted never coming to maturity. The kinds sown were Bourbon, hybrid Bourbon obtained by artificial impregnation with the best American varieties, and Sea Island. In 1845, Mr. Elphinston reported to Government that the chief obstacles to success were the cost of tillage, the barrenness of the red soil, and the highness of the rents owing to the difficulty of procuring good land, the inhabitants depending on their fields for their subsistence. He was of opinion that the climate suited the plants well, even those of foreign origin. In 1845-46 the produce of the gardens amounted only to $\frac{1}{4}$ ton ($\frac{1}{2}$ *khandis*) of uncleaned and $\frac{2}{3}$ ton ($1\frac{1}{2}$ *khandis*) of clean cotton. The Collector, Mr. Liddell, who succeeded Mr. Elphinston, recommended that the experiments should be given up. The farms were closed in April 1846, and since then no fresh experiments have been made.

The district does not yield grain enough for the wants of its people. Large quantities are brought in from above the Sahyádrí hills and from the Kolaba district. Much of the soil is so poor that, after yielding two or three crops in succession, it requires several years' fallow.

Cultivators.

In all parts of the district not only the agricultural classes, Kumbis, Maráthás, Bhandáris, Musalmáns, and Mhárs, but almost the whole population, including some Bráhmáns, are engaged in tillage. Washermen, tailors, blacksmiths, and other artisans, unable to support themselves by their callings, are often forced to eke out their gains by cultivation. Prabhus, Bháts, and Gujars are the only classes who never directly engage in field work.

The six chief classes¹ of cultivators are, Kumbis, Maráthás, Bhandáris, Musalmáns, Mhárs, and Bráhmáns. No materials are available from which even an approximate estimate of the strength of these classes can be made. Of Bráhmáns very few actually engage in field work. They hold land both as proprietors and tenants, and either employ labourers or sub-let to persons who pay them a fixed share of the produce.

¹ Contributed by Mr. J. R. Gibson, Dy. Supt. Rev. Survey.

Except in a few coast villages entirely occupied by Musalmáns and Bhandáris, Kunbis and Mhárs are found in almost every part of the district. Maráthás are chiefly found in the *valáti*, or upland, villages of the centre of the district, and close under the Sahyádrí hills. Bhandáris and Musalmáns are always found in the lowland, *kháláti*, coast villages.¹ Bráhmans live in the coast villages and in the centre of the district. They are seldom found near the Sahyádrí hills.

The Kunbi generally lives in a small house with mud and gravel walls, and a thatched roof held up by wooden posts let in at the corners and gables. The rafters are generally bamboos, and the thatch bundles of rice straw and coarse grass. A rough wooden frame let into the wall supports a small door, made as often of split bamboos as of wood, and one or two small holes in the wall serve to let in a little air and light and to let out smoke. The inside is generally divided into two rooms, a larger where the family cook and live in the day time, and a smaller the sleeping and store room. At the gable end is usually a lean-to shed in which cattle and field tools are kept, and grass and wood stored. A Marátha's house is generally better and much neater than a Kunbi's, with sun-dried brick walls, a tiled roof, a front verandah, and in the fair season an outer booth of palm-leaf matting, the floor every day carefully smoothed and cowdunged. Most Bráhmans, Bhandáris, and Musalmáns live in well-built houses raised on stone plinths. The walls are of masonry or burnt brick work and the roofs are tiled. The wood work in the roof is generally substantial and well built, and the door and window frames neatly put together. Wooden shutters are generally used, though glazed windows are sometimes seen in Ratnágiri, Málvan, Vengurla, and other towns. The village Mhárs usually live in a small shapeless roughly-built thatched mud hut. But pensioners and other high class Mhárs generally, like the Maráthás, build a better style of house.

The Kunbi owns a pair of bullocks, a cow or buffalo, and a few goats. His field tools are, one plough, three harrows, one with short wooden teeth, one a log for crushing clods, and one a flat smoothing board; two or three picks, *kolals*, for digging hill lands; two or three billhooks, *koilas*; two or three hoes, *pávilas*; two or three sickles; and half a dozen mallets, *mogris*, for hand crushing clods. His house gear is a few copper and brass eating and drinking dishes and cups, and two or three small cooking pots. His water is always carried, and his food very often cooked, in earthen pots. None have large stores of grain, though a few of the better class keep small stocks of *níchai* or *harik* enough to support their families for a few months after harvest and to supply seed grain. Except that in the matter of household goods they are better off than the Kunbis, this account applies equally to most Marátha husbandmen.

The Kunbi is an orderly, hardworking and excellent cultivator, very skilful and clever in damming streams and cutting water-

¹ In the Konkan the inner uplands are called *valati* (*varthagat*, uplands) and the coast lands *khálati* (*khulithaga*, low lands).

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courses for rice fields. Whenever the soil suits, and there is water, he grows garden crops and uses manure freely. The Marátha is orderly and steady but in a less degree than the Kunbi, and his style of tillage shows that he has not the same patient endurance of hard work. The Bhandári is not so good a cultivator either as the Marátha or the Kunbi. Most of them follow the more gainful calling of toddy-drawing and the lands they till, in the sandy tracts on the sea coast are, from the nature of the soil, easily worked. The Musalmán is a still worse cultivator than the Bhandári. They have less energy and perseverance, and many of them, fishers or sailors in the fair season, are less dependent than others on the success of their tillage. They use manure freely but are less careful about ploughing and weeding, and seldom cultivate fields of poor soil. Mhárs are rarely good husbandmen. Holding it in return for service, under the khoti system, they seldom pay for their land or only pay a nominal rent. Skilled in cutting stones suited for roof props, and much employed in building stone embankments for reclamations and temple causeways, Mhárs have not the same inducement to become good cultivators as Kunbis and others who entirely depend on the outturn of their fields.

Many Maráthás and some few Kunbis are proprietors with tenants. But the bulk of the cultivating classes are small landholders, many of them also working as field labourers. So dense is the population that nearly all are forced, in some way or other, to add to the store supplied by their fields. Every year, soon after harvest, Kunbis and Mhárs migrate in thousands to Bombay and other labour markets, and return to their homes at the beginning of the next cultivating season, with money enough to buy seed grain and keep their families during the rainy months. In their absence the women and children live on the small store of grain they may have been able to keep over from the previous harvest, and eke out a subsistence by the sale of firewood, grass, and fowls. Maráthás and Brahmans do not migrate to the same extent as Kunbis. But many of them enter the army, police, and other branches of Government service, and remit money to their relations who remain in Ratnágiri to look after the land. Musalmáns engage in trade or in shipping and add the profits to what their lands yield them.

Not from high rents, but chiefly because the land fails to yield enough food to support the people, there is considerable indebtedness among cultivators. This is especially the case with Kunbis who depend so much on labour for their support. If sick or unable to find work during the fair season, the Kunbi can hardly fail to run into debt. Among Bráhmans, Maráthás, Bhandáris, and Musalmáns, whose sources of extra income are more certain, law suits, family ceremonies, and rich living are the chief causes of indebtedness.

Bad Seasons.

Since the beginning of British rule, there has been no year of distress so severe and general as to amount to famine. Of only two of the older famines, those of 1790 and 1802-03, does any information remain. Both of them seem to have been felt all over the district. In the three northern sub-divisions, Dápoli, Chiplun, and Ratnágiri, the famine of 1790 lasted from eight to ten months,

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and that of 1802 from twelve to fourteen. On both occasions the Khed sub-division suffered severely. In 1802 rice is said to have risen to about four pounds for a shilling, and in 1792 the price was even higher. In Rájápur there was in 1792 scarcity of food for four months, and in 1802 for two or three months. Rice was sold at three pounds for a shilling. In Málvan, in 1802, the distress was great, and lasted for more than a year. Almost all the people of eight villages were carried off by hunger and disease. The survivors fled to Goa. To relieve the distress private food houses, *annachhatras*, were opened, and grain distributed daily. But these houses were too few, and the gifts of grain too small to do much to stay the general distress. In a few places, particularly in the Dápoli sub-division, the Peshwa's officers opened public relief houses. At Khed, the building now used as the Mámlatdár's office, was till very lately known as the relief-house, *annachhatra*. In 1802 in the south of the district the revenue was remitted. And for three years to tempt back those who had left, much less than the former rents were levied, and creditors were prevented from recovering their debts. In 1824 a very light rainfall was followed by a complete failure of crops in high grounds and a partial failure in low rice-lands. The very high price of grain in some degree made up for the scanty harvest, but the general loss was very great, and as the year before (1823) had also been unfavourable, large remissions of rent had to be granted.¹

In 1876 an insufficient rainfall, 31 inches against an average of 104, caused much loss of crops. Public health was bad, and there was considerable distress. The first fall of rain in the second week of June was followed by a break so long as to do serious injury to the young plants. The latter rains entirely failed, and nearly the whole of the *harik*, from one-half to three-fourths of the *nágli* and *rari*, and a quarter of the rice crop were lost. The failure told very seriously on the lower classes whose staple food, *nágli*, *harik*, and *rari*, rose from about forty-two to twenty-six pounds. To relieve distress, besides those begun by the Local Funds Committee, four public works, repairs to the Vijaydurg, Vághotan, and Phonda pass, road, making a road from Chiplun to Guhágár by Ibhrámpur, improvements to the Phonda, Rájápur, and Lánja road, and a strengthening dam for the Pendur lake, were undertaken by Provincial Funds. Of a total of £7736 (Rs. 77,360) spent on relief works £3495 (Rs. 34,950) were debited to Local Funds and £4241 (Rs. 42,410) to Provincial Funds. Happily, an unusual demand for labour sprang up in and near Bombay, and it was estimated that double the usual number or at least 150,000 of the poorer workers moved to Bombay for part of the fair season, and returned with savings enough to last them till the next harvest (1877-78). This was very favourable as *harik*, the staple food of the poorer classes, was a bumper crop.

¹ Colonel Etheridge's Famine Report (1867), 113-121.

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CAPITAL.¹

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Capitalists.

THE 1872 census returns showed twenty-four bankers and money changers, and 5337 merchants and traders. Most of the latter were probably capitalists only in name, trading on borrowed money. Under the head capitalists and traders, the 1878 license tax assessment papers show 3310 persons. Of 2290 assessed on yearly incomes of more than £10, 340 had from £10 to £15, 998 from £15 to £25, 380 from £25 to £35, 168 from £35 to £50, 133 from £50 to £75, 96 from £75 to £100, 54 from £100 to £125, 17 from £125 to £150, 32 from £150 to £200, 39 from £200 to £300, 16 from £300 to £400, 9 from £400 to £500, 6 from £500 to £750, one from £750 to £1000, and one over £1000.

Currency.

The imperial currency is at present the sole circulating medium. Up to 1835, the chief coin was the Surat rupee, supplemented by various older rupees known as Chándvad, Doulatabad, Hukeri, Chikodi, and the Emperor Akbar's interesting old *charkoni* or square rupee. The south Konkan has never had a local mint. None of the adventurers who, from time to time, rose like the Angrias to half independence, affected a private mint or a special superscription. The currency was mixed, the brisk sea trade bringing into the district every sort of Indian coin. Since 1835, the Company's rupee has gradually superseded this heterogeneous currency. Till lately a few Surat and other coins continued to find their way into the Government treasuries. But their circulation has entirely ceased. The few that remain are kept as relics and curiosities by rich traders. The square Akbari rupees now very rare, are held in great veneration, and much prized as 'luck pennies.' According to the 1872 census returns, there were four money changers, *sarāfs*, and twenty who were bankers as well as money changers.

Bankers.

There are strictly speaking no banks in the district. The most important moneylenders are called *Sūrkārs*; but they do not, as a rule, open deposit accounts. None of the local merchants or traders carry on insurance business. Cotton cargoes from Vengurla, Rājāpur, and Chiplun, are insured in Bombay.

Insurance.

Exchange
Bills.

The leading Ratnāgiri traders grant exchange bills, *hundis*, payable at the following towns, Poona, Baroda, Belgaum, Bombay, Sātara, Sháhāpur, Gokāk, Rāmdurg, Vengurla, Rājāpur, Chiplun,

¹ Contributed by Mr. G. W. Vidal, C. S.

Sangameshvar, Malkápur, Mahád, Rohe, Revdanda, Goregaon, Karhád, Dhárwár, Hubli, Sângli, Miraj, and Kurundvád. On bills granted at sight a premium of from $\frac{1}{2}$ to 1 per cent (8 *as.*—1 rupee) is charged, and on bills payable at from five to forty-one days after sight the premium ranges from $\frac{1}{2}$ to $\frac{3}{4}$ per cent (8–12 *as.*). No bills are drawn for periods of more than forty-one days' sight.

Of townspeople, the only classes who save habitually are traders, moneylenders, pleaders, Government officials, and occasionally skilled artisans. In the rural parts, usurers and shopkeepers alone, as a rule, put by money. The cultivating classes are rarely in a position to save. Most cultivators, who are registered occupants, have to borrow on the security of the coming crop, while the wages earned by field labourers during the agricultural season, from May to November, enable them to tide over only a portion of the year. For the rest of the year both classes are compelled to seek work in Bombay. Muhammadans as a class make little, and save less. In the coast villages, the most influential Bhandáris, owning large palm gardens, engage in the liquor trade, and often acquire moderate wealth, and here and there a thrifty husbandman by lending his savings scrapes together a little money. But with cultivators as a class, the possession of capital is the exception, the want of it, the rule. Any surplus cash which may find its way into a cultivator's hands is generally hoarded and buried underground. Very few of the lower classes attempt to increase their store by the profitable investment of their savings. The seafaring and fishing population, in all about 80,000 souls, chiefly Musalmáns of the Dáldi class, Gábits, Kolis, Khárvis, and here and there a few Bhandáris, are, as a rule, very independent and in fairly comfortable circumstances. As a class they are more improvident and less frugal than the cultivators. The most prosperous among them seldom save more than enough, after many years of labour, to build a small fishing smack, and to keep up their stock of nets and fishing tackle. A cultivator, labourer, or fisherman, whose yearly income falls short of £5 (Rs. 50), can lay by nothing. If he has more than £5 (Rs. 50), he may, if frugal and with a small family, save. But such savings are usually absorbed in marriages and other family expenses. A Government clerk drawing less than £3 (Rs. 30) a month, cannot, as a rule, lay by money. On the general question of expenditure no exact calculation can be made, as expenses very largely depend on the number of persons whom the head of the family supports. Marriages, caste feasts, and other special expenses vary greatly according to the position and wealth of the entertainer. But on the whole the poorer classes in Ratnágiri are in this respect far less extravagant than the Deccan cultivators. It is also worthy of note that the necessary expenditure on these religious and festive occasions is said to be considerably less now than it was forty years ago. Whether this reform is due to greater enlightenment, or, as some would say, to stern necessity, is open to argument. Whatever may be the cause, the result is that to provide the funds for their daughters' weddings, the poor classes have to stint themselves and live below their fair standard of comfort.

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Classes who
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Investment.

State Securities.

Savings Bank.

Savings are very rarely invested either in Government securities or in joint stock shares. In 1879 the amount paid as interest to holders of Government paper was £111 (Rs. 1110). The Government Savings Bank is used almost exclusively by Government servants and pleaders, who find it the safest and least troublesome way of disposing of their surplus cash. The institution attracts very few deposits from other classes. In 1879 the Savings Bank's deposits amounted to £3140 (Rs. 31,400).

Land.

Building sites are not much sought after as an investment. Except in the larger towns, such as Chiplun, Rájápur, and Vengurla, where there is a considerable trade, building plots have little value, and yield little return. Arable land is everywhere in great demand. The district is thickly peopled, and nearly the whole available arable area has long since been taken up. The produce of the land is never enough for the people's food. Every year grain has to be brought from Bombay, the Deccan, and southern Marátha country, so that in spite of the ruggedness of the district and the poverty of the soil, land is valuable and much sought after. The holdings of peasant proprietors, *dhárekars*,¹ are most in demand. The average sale value of rice land held on this tenure is about £10 (Rs. 100) an acre, and near the large coast towns as much as £40 to £50 (Rs. 400-500) is often realised. The average acre value of dry crop, *varkas*, land yielding only coarse hill grains² is from £1 10s. to £5 (Rs. 15-50) the acre. The lands of the quasi-*dhárekars*, who, under the name of *daspathkars* or *dupathkars*, are found in the Dápoli sub-division, are also transferable by sale and mortgage: but as they are all burdened by the liability to pay the *khot* some fixed profit over and above the state demand, they do not much commend themselves to investors. Next to peasant holdings the best form of land investment is the purchase of the estates of the superior holders known as *khots*.³ In former years the acquisition of a *khoti* estate, with the power position and influence it brought, was an object of ambition to many a rising family. Within the last ten or twenty years the popularity of these investments has declined. The minute sub-division of shares and consequent disputes

¹ The *dhárekari* holds his land direct from the state and pays his assessment in cash. Subject to the state demand he has a full right in his holding, and may inherit, sell, and mortgage, and, within certain limits, re-enter after relinquishment. In villages where there are *khot*, or hereditary village farmers, the *dhárekari* pays his rent through the *khots*. The *khot* can claim no profit from the *dhárekari*. The *khot's* only claim over peasant-held, *dhára*, land is a reversionary interest when it has finally lapsed. Details are given below, p. 205.

² The chief hill grains are *nachni* Eleusine coracana, *mau* Panicum miliare, and *harik* Paspalum scrobiculatum.

³ The *khot* is the superior holder, or a coparcenary of superior holders, who have the hereditary right of settling with Government for the whole village rental. The *khot*, or the members of the *khot* coparcenary, usually hold and farm a small portion of the village lands themselves. The rest of the lands are sub-let to husbandmen, most of whom are privileged tenants, or tenants by prescriptive right, who cannot be ousted so long as they pay the *khot* the customary, or if agreed on, a fixed proportion of the crop. Standing crops are annually inspected and the outturn appraised by the *khot*. Only about five per cent of the tenants are now tenants at will paying rack-rents. Details are given below, p. 203.

and litigation, the tenants' growing independence, and the increasing difficulty in collecting rents, the uncertainty regarding rights and privileges claimed by the *khots* and disputed by the state, have all more or less contributed to this effect.¹ Still they yield fair profits, and a yearly return of from six to twelve per cent is usually expected and realised. The occupancy rights of tenants in *khoti* lands are heritable but not ordinarily transferable by sale or mortgage. The purchase of such rights, even could it be effected, would yield little or no return, as after paying the *khot's* demand, only a margin sufficient for the bare subsistence of the cultivator usually remains. Occasionally *khoti* tenants who have money to invest, purchase or become mortgagees of their occupancies from the *khots*, or in other words redeem, either for ever or for a time, the rent levied by the *khot* over and above the Government assessment. When this is done the *khot* levies the state demand only, and the tenant becomes virtually a peasant holder, *dhárekari*.² But such cases are unusual as few *khot* tenants are in a position to redeem by a lump payment the customary dues of their superior holders.

In addition to *dhúra* and *khoti* estates, here and there salt wastes and tidal swamps require capital to bring them under tillage. The state has always reserved its right of letting such lands for cultivation. Improvement leases, *istáwa kauls*, were granted by the Marátha government, and by this means a large area of swamp has from time to time been converted into valuable rice land and cocoanut gardens. In such cases a nominal rent is levied for a term of years, and then the full assessment is charged. These *kaul* lands, when brought under full cultivation, command a high price, but are not often in the market. Reclamations usually require a considerable outlay, but where an investor can afford to let his money lie idle for a few years, and has not to borrow at ruinous interest, they eventually yield a good return.

Except in the larger towns, houses are very seldom built as a speculation. Well-to-do traders, retired Government servants, and pleaders, build for their own use substantial and comfortable dwellings, but seldom let them to tenants. Ornaments are almost a necessity to all classes, and a considerable amount of capital is thus unproductively locked up either in the owner's or the pawn broker's hands. The very poorest women of the Marátha and Kunbi

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¹ Mr. Crawford's reply to the Famine Commission, 1879.

² The following instances occurred in the Guhagu petty division of Chiplun. In 1845, a *khot* sold for £12 10s. (Rs. 125) to the occupancy tenant $1\frac{1}{2}$ acres of rice land and $2\frac{1}{2}$ acres of dry crop. $3\frac{1}{2}$ acres in all assessed at 13s. 4d. (Rs. 6-11-6). In 1869 the buyer mortgaged the same land to a third party for £20 (Rs. 200). In another case $1\frac{1}{2}$ acres of rice land assessed at 8s. (Rs. 4) were mortgaged by the *khot* to the occupancy tenant for £7 1s. (Rs. 72). In another $1\frac{1}{2}$ acres of rice land assessed at 3s. 4d. (Rs. 2 10-9) were mortgaged for £5 (Rs. 50). In another about a third ($\frac{1}{3}$ th) of an acre of rice land assessed at 1s. 10½d. (15 as.) was mortgaged for £2 10s. (Rs. 25). In another rice and dry crop land measuring together $11\frac{1}{4}$ acres and assessed at 9s. 2d. (Rs. 4-9-6) were mortgaged for £5 8s. (Rs. 54). In another rice and dry crop land measuring together $1\frac{1}{4}$ acres, assessed at 16s. 9½d. (Rs. 8 6-6), were mortgaged for £6 (Rs. 60). These cases, which vary much as to the proportion borne by the Government assessment to the sale or mortgage value of the dues redeemed, are not common and are found only in certain parts of the district.

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Ornaments.

castes have, at least, a gold or silver-gilt nose ring, *nath*, a necklace of gold and glass beads strung on silk cord, *galsari*, and a pair of gold or gilt earrings, *bugdi*; while the men almost without exception have a single gold earring, *bhikbāli*, worn on the upper lobe of the right ear, and a silver waistbelt, *kargota*. Other ornaments are added as funds admit, such as silver toe rings, *jodvi*, silver armlets, *vāki*, strings of old Venetian coins, *putlis*, and gold hair ornaments, *ketak*, for the women, and finger rings for the men. Amongst the higher castes such as Brāhmans and Shenvis, no woman's dress is complete without, in addition to the nose ring, earrings *bugdi*, and necklace *galsari*, a gold neck chain *sari*, a pair of gold bracelets *pūlli*, a pair of gold earrings with pearl pendants *kāp*, worn lower on the ear than the *bugdi*, and another neck ornament called *thushi*. The younger women also wear heavy silver anklets, *todās*. Men of the same class wear gold and gem finger rings, a gold necklace of a pattern called *kanthi*, and occasionally, though not always, the single earring *bhikbāli*. To these the rich add various other ornaments and trinkets. It is difficult to estimate the capital represented by the people's ornaments. The license tax returns of 1878 give a total of 2008 working Sonārs or gold and silversmiths, or one for every five hundred of the population, all of whom, it is to be presumed, find employment in making new or re-making old ornaments. Numbers of the inhabitants also who visit Bombay buy ornaments there, and Ratnāgiri sepoy, while on service in other parts of the Presidency, invest their savings in ornaments. The value of a family's ornaments may be said to range from about 10s. to £100 (Rs. 5-1000).

Shipping.

Occasionally the leading merchants invest in native craft, *pātīmārs* or *phatēmāris*, *kotiās*, *machvās* and *padārs*, generally buying them ready made and equipped. Native craft are also often mortgaged by their needy owners to moneylenders. But most of the vessels employed in the carrying trade are the property of the seafaring classes, Dāldis, Kōlis, Bhandāris, Kharvis, and Gābits. Eight per cent is considered a fair rate of interest on capital invested in shipping, and the average cost of a new vessel is about £28 the ton (Rs. 10 the *khandi*).

Money
Lending.

No class has a monopoly in usury. All who are able to save, from the wealthiest Gujar to the poorest Brāhman beggar, occasionally lend money. Besides Brāhmans and Gujars, though few of them are professional moneylenders, Shenvis, Prabhus, Vānis, Bhātiās, Marāthās, Kumbis, Bhandāris, Musalmāns, Dhangars, and, in rare instances, even Mhārs, advance money on bonds. In *khoti* villages the hereditary or *catundār khots*, who receive most of their dues in kind, are the chief grain dealers and moneylenders. Their position corresponds to that of the Deccan *Sarkars*, with this difference, that having a direct hereditary interest in the prosperity of their villages and the welfare of their tenants, they are more liberal in their dealings with their debtors. On the other hand, mortgagee *khots*, unfortunately rather common in Ratnagiri, who hold estates for a limited time, are almost always unpopular, having no permanent interest, and being

naturally anxious to get in a short time the largest possible return. No Márvádis have as yet established themselves in this district. Only the more important moneylenders, Gujars and Bráhmans, keep a regular day book, *kird*, and ledger, *khatavni*. The usual practice among Bráhmans and other educated creditors is to have their accounts written on loose balance sheets, *shilakband*. Petty lenders, and those unable to read and write, keep no accounts and rely solely on their bonds. Gujars, Bráhmans, and most educated moneylenders advance money to all classes of borrowers, while Maráthás, Kunbis, and Musalmáns deal with the poorer cultivators. The same rates of interest are charged by both. Combinations among different creditors against a common debtor are rare. Each creditor acts independently and does the best for himself. As a last resource the civil courts are always resorted to for the recovery of debts, but decrees are not always executed. The judgment creditor prefers to get a mortgage from the debtor of property equivalent in value to the amount of the decree, or of his whole estate if less in value than the claim. If he succeeds in this, he is content to let the decree stand over; if he fails, he obtains execution, and at the auction usually buys the debtors' property at a nominal price. The judgment creditor is generally the only bidder. Prior encumbrances and uncertainty as to the precise interest of the debtor in the property choke off competition. The judgment creditor obtains formal possession, but frequently, either of his own free will or to avoid further trouble, on his executing an agreement to pay rent, allows the debtor to remain as his tenant. Imprisonment is not often resorted to, and cases of claims being written off as bad debts are unknown. Complaints by debtors that bonds have been forged or passed without consideration, or that part payments have not been credited, or that excessive rent has been charged, are occasionally made, but seldom proved. Instances in which debtors have been collusively kept in ignorance of suits filed against them are either unknown or very rare.

The Government rupee is the standard in all moneylending transactions. Except in Málvan, and by the Gujars who use the *samvat* year, and in rare cases when the Christian year is employed, interest is charged for the *shak* year. If the term exceeds three years no charge is made for the intercalary month. When adequate security is offered, there is no marked difference in the rates of interest levied from different classes of borrowers. But advances on personal security depend for their terms solely on the credit of the individual borrower. The rate charged on petty loans, secured by pledging ornaments or other movable property, varies from twelve to twenty-four per cent. In very extreme cases as much as thirty-six per cent is said to be exacted. In towns the ruling rate is somewhat less than in villages. Advances on personal security are made at from twenty-five to thirty-six per cent according to the credit of the borrower. Money advances with a lien on crops are seldom made. Grain both for seed and subsistence is habitually borrowed by the poorer cultivators to be repaid at harvest time with an additional fourth of the quantity lent. This is called the *sacai*, or one and a

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Interest.

quarter system, and as these loans are usually repaid in about six months, the charge is equivalent to a yearly rate of fifty per cent. Provided the title is undisputed, valuable effects can be mortgaged at from nine to twelve per cent interest, and lands and houses at from six to nine per cent.

Borrowers.

Husbandmen.

The agricultural classes, though frugal and given to few extravagances, are forced to borrow. Few cultivators reap a sufficient harvest to satisfy their own needs and repay their creditors. Field labourers can subsist only for a few months on the wages of tillage. The local demand for other labour is small and uncertain, and the villagers own neither carts nor pack bullocks wherewith to earn carriers' wage. Unpromising as their condition seems, the poorer classes manage to live, and are probably less encumbered with debt than the Deccan cultivators. The chief causes which restore equilibrium and avert destitution are emigration and military service. In November soon after the early harvest is over, the able-bodied husbandman leaving a scanty store of coarse grain for the support of the young, the sick, and the aged of his family, marches to Bombay. There for six months or more he usually succeeds in getting good wages, and saving a few rupees, returns to his home in May, in time to prepare his fields for the yearly crop. About 100,000 persons, or ten per cent of the population, are believed to perform this yearly pilgrimage to Bombay. Others, getting permanent and lucrative employment, remain absent from their villages for long periods, remitting their savings to their families. The native army, largely recruited from the Ratnágiri district, gives employment to numbers of the agricultural and labouring classes. Besides the remittances poured into the district by men on service, no less than £45,000 (Rs. 4,50,000) are yearly paid by the state to military pensioners. Thus the revenue collected by Government is in great part returned to the district, and the cultivators enabled to maintain themselves despite the deficient produce of their land. The time of greatest pressure throughout the district, and more especially in the wild country on the slopes and spurs of the Sahyádrí range, is from May to November, when the cultivators, having exhausted their stores of food and money, are anxiously waiting for the coming harvest. As no part of the district yields grain enough for the population, large imports by sea and land are a yearly necessity. During the rainy months the imports cease and prices rise. It is at all times difficult to carry grain to the tract at the foot of the Sahyádrí hills, and this is more especially the case during the rainy months. In the best of seasons some scarcity is inevitable, and for some weeks before harvest, the hill peasantry are compelled to live on esculent roots and leaves and wild plantains. These privations are expected and endured with characteristic patience. Any failure of the coarse hill grains which are to the Konkanis what millets are to the Deccanis, causes severe distress. In the coast districts the inhabitants are less dependent on the harvest, and whether the rice crop is large or scanty makes little difference to the poorer classes, to whom such food is an unattainable luxury. Here, as in the inland villages, it is in the rainy months that the pinch is felt. Very few cultivators can tide over this time without obtaining advances of

grain or money on the security of the coming crop. The grain dealers and moneylenders have become a necessary part of the system. Probably half the entire cultivation depends mainly on the capital thus utilized. As is natural, complaints of unfair dealings are now and then made, but on the whole the borrowers admit the usefulness of the lenders and are satisfied with the terms they obtain. Agrarian crime is almost unknown. Creditors are not as a rule greedy. They are often forbearing and will help a cultivator with seed and food, when his credit is so low that a Deccan Márvádi would not advance him an anna.¹ Artisans in the larger towns, doing regular and lucrative work, obtain better terms than ordinary cultivators, and Maráthás and Kumbis as a rule borrow on easier terms than village Mhárs. The credit of the Mhárs, as a class, stands low, not so much because of their poverty or of their social inferiority, as that they too often prove incorrigible. Equal in intelligence to the Kumbi or the Chambhár, the Mhár is less subservient, and as a debtor less easily managed. Performing numerous useful services to the community, for which he receives little or no remuneration, the Mhár is prone to treat all money lent to him as his lawfully earned reward. When dunned he repudiates; when sued, if he condescends to appear, he denies execution of the bond. When the creditor enforces the decree and the Mhár's land is sold by auction, no one is bold enough to bid, and the decree holder becomes the purchaser. Subsequently when all legal processes have been duly gone through, and the creditor has obtained formal possession of the land, the Mhár obstinately declines to be ousted. Backed by his fraternity, a powerful and united body, he persistently defies the creditor, and effectually deters any peaceable cultivator from undertaking the land as a sub-tenant of the lawful proprietor, till the latter gives up the attempt in disgust, and resolves to avoid future dealings with Mhárs. Opinions are somewhat divided as to whether the general indebtedness of the cultivators has or has not increased within the past ten years. On the one hand, it is urged that while the population is larger, production has either remained stationary, or owing to over-cultivation and want of manure has fallen off. The number of suits on bonds, as far as this forms a guide, also shows a progressive increase. On the other hand, it is certain that prevailing high prices, better communications, and more open markets for labour and produce have greatly benefited the district. Although the country is poor, populous, and rugged, there has been much material progress. The cultivators everywhere, especially in the villages near the coast, show greater independence, and are no longer the Khot's obedient serfs and bondsmen. In short, the general condition of the country and people has steadily improved, since the city of Bombay suddenly increased in prosperity eighteen or twenty years ago.²

The number of skilled town artisans, whose work commands high wages, is very small. The few that are found are prosperous,

Chapter V.**Capital.****Borrowers.****Husbandmen.****Artisans.**

¹ Famine Commission Replies, 1878. Mr. A. T. Crawford, C. S.

² Famine Commission Replies, 1878. Mr. A. T. Crawford, C. S.

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Capital.

intelligent, and usually free from debt. But neither in intelligence nor in worldly means is there any practical difference between such village artisans as shoemakers, curriers, and carpenters, and the general mass of cultivators. As a class they are equally indebted and equally liable to be imposed upon, while they are less provident and more given to drink than the Maratha and Kunbi cultivators.

Transfers of
Land

Sales of land in execution of decrees have increased within the last ten years. The chief cause of this was the registration of *Khots'* tenants as survey occupants in the villages where the survey settlement was first introduced, in the Dápoli, Khed, and Chiplun subdivisions. Numbers of such occupancies were sold in execution of decrees during the few years after the introduction of the survey, but the transfers were for the most part nominal, inas-much as the occupancy right of the tenants, where it existed, was transferable by inheritance only, and not by sale or mortgage, and the auction purchasers of the tenants' interest could not acquire thereby the privileges of permanent occupants. The number of sales on account of failure to pay assessment has not been large, but many holdings of *kholi* land have for this cause been transferred from the tenants in whose names they stood to the *Khots'* own occupancy. From the same causes, namely, the registration of *kholi* tenants as survey occupants and an uncertainty as to their legal position, there has been an increase in the amount of land mortgaged, but the title of the mortgagees in such cases is usually bad. In mortgages there is no fixed custom as regards possession. In each case it is a matter of agreement between the parties.

Labour
Mortgage.

The poorest villagers occasionally serve their creditors for a term of years to pay debts contracted by themselves, or more often, by their fathers. Service of this description never precedes a loan. An able-bodied labourer would be credited with about £1 Rs. 10 a year in liquidation of a debt. He would receive in addition his necessary food and clothing, and by custom a pair of sandals once a year. He would be bound to devote himself exclusively to the service of his creditor, but the latter would have no claim to the services of the bondsman's wife and children. Interest on the original debt does not run during the performance of the service. The debtor is allowed no money for any incidental expenses, nor can he work on his own account. He is entirely dependent on the creditor who cannot, however, transfer his services to any other person. Should the bondsman fail in his contract, the creditor would proceed to exact service or enforce payment of the debt from the surety, without whom such bonds are seldom accepted. A bond which was produced in a criminal trial revealed the following facts.¹ A villager borrowed

¹ The bond ran as follows. *Chaitra* and 9th *Shak* 1798, creditor A.B. of X; debtor C.D. of the same place. My father I.F. in *Shak* 1788 borrowed £1 12s. (Rs. 16) to pay a debt to G.H. for which he passed a bond, which has not been paid either principal or interest. Therefore as you claimed the money at my father's death, and I was not able to pay it, I entered your service, and serve you for five years. Afterwards your account amounted in all to £2 (Rs. 20) which

£1 12s. (Rs. 16) from a moneylender in 1866. He died a few years afterwards leaving the debt unpaid, and amounting then to £2 (Rs. 20) as a legacy to his son, then a child. The son, who had no means, entered the creditor's service. After serving for five years he executed a bond with a surety, to serve for seven years more in satisfaction of the debt. Thus twelve years' service was exacted from the boy, from his eighth to his twentieth year, for a debt of £2 (Rs. 20) incurred by his father. Hereditary bondage in the strict sense of the term does not exist. Children of concubines and descendants of women formerly purchased as slaves are found in a few families. Performing the same duties as the hired servants of the household, they are treated with greater kindness and consideration, and are seldom tempted by higher wages to leave their homes.

A labourer¹ was, before 1863, paid from 1½d. to 3d. (1-2 annas) a day; the rate has now risen to from 4½d. to 6d. (3-4 annas). A field labourer earns rather less than a town labourer. Masons, carpenters, and other skilled workmen were, before 1863, paid from 4½d. to 9d. (3-6 annas) a day, now the rate is 1s. (8 annas) and upwards. The rise in wages is due to improved communications and to the increased cost of living.

During the last fifty years the rupee price of rice of the second quality, the food of the upper classes, has varied from fifteen pounds in 1800 to fifty-nine in 1853, and of *níchni*, Eleusine coracana, the food of the lower classes, from twenty-one pounds in 1864 to seventy-eight in 1843. The returns show, for such years as are available before 1855, on the whole cheap grain, the rupee price of rice varying from fifty-nine to thirty-two pounds and averaging forty-seven pounds; from 1856 to 1866 a steady rise of prices from thirty-six to fifteen pounds and averaging twenty-five pounds; from 1867 to 1876 cheaper prices varying from eighteen to thirty-two and averaging twenty-three pounds; during the famine of 1877 and 1878 a rise to seventeen; and in 1879, a fall to twenty-three pounds. The changes in the price of *náchni* always considerably cheaper correspond closely to those of rice.

Ratnágiri Grain Rupee Prices, 1828-1878.

YEAR.	Rice, second sort.	Náchni	YEAR.	Rice, second sort.	Náchni	YEAR.	Rice, second sort.	Náchni	YEAR.	Rice second sort.	Náchni
1828-31	53	64	1876	36	...	1864	18	21	1872	20	27
1832-33	32	75	1857	31	...	1865	17	29	1873	32	37
1838	48	69	1858	31	...	1866	15	26	1874	27	50
1843	54	78	1859	24	40	1867	22	40	1875	25	45
1848	54	...	1860	27	52	1868	13	43	1876	23	33
1853	59	...	1861	31	57	1869	20	28	1877	17	24
1854	43	56	1862	24	36	1870	23	40	1878	17	25
1855	39	...	1863	21	35	1871	21	39	1879	23	23

remained unpaid. From this day, without paying interest, I will serve you for seven years. Should I fail I will pay interest at twelve per cent. I will serve you without making objections and will behave well. I, K. L. of the same place guarantee the fulfilment of the above contract. If the contracting party fail, I will myself serve you until the debt is liquidated. If I do not serve you, I will pay the interest at twelve per cent until the debt is liquidated. We have executed this deed willingly. Witnesses M.N., O.P. (Signed) C.D., K.L.

¹ The paras about prices, wages, and weights and measures have been compiled by Mr. Rangráo Bhimáji, Huzur Deputy Collector.

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Chapter V.

Capital.

Weights and Measures.

Pearls and precious stones are valued by their purity. Gold and silver are weighed according to the following scale: four grains of *udid*, *Phaseolus mungo*, one *gunj*, *Abnus precatorius*, seed; eight *gunjs*, one *māsa*; twelve *māsas*, one *tola*; twenty-four *tolas*, one *sher*. In weighing these metals the current rupee is generally used. The rupee is four *gunjs* less than a *tola*. Goldsmiths' weights are generally broken pieces of china, lead, brass, or bell-metal, in a variety of shapes. Copper, brass, lead, and other cheaper metals are sold by weight, one *sher* weighing in Ratnāgiri eighty rupees and in some other places seventy-two. Iron, cotton, butter, oil, groceries, and other articles of every day use are sold by weight *shers*, the local *shers* varying greatly in size.¹ The table runs as follows: one *chhatāk* ($4\frac{1}{2}$ *tāks*), $\frac{1}{10}$ of a *sher*; one *nartāk* or *adhipāt*, $\frac{1}{2}$ of a *sher*; one *pācher*, $\frac{1}{4}$ of a *sher*; one *achher*, $\frac{1}{2}$ of a *sher*; two *achhers*, one *sher*; $2\frac{1}{2}$ *shers*, $\frac{1}{10}$ of a *man*; five *shers*, $\frac{1}{8}$ of a *man*; ten *shers* or one *dhadu*, $\frac{1}{4}$ of a *man*; two *dhadus*, $\frac{1}{2}$ of a *man*; four *dhadus* or two *adhmans*, one *man*. All kinds of grain are sold by capacity measures; ² two *adhipāt*, one *pācher*; two *pācher*, one *achher*; two *achhers*, one *sher*; four *shers*, one *pāgali*; in the petty divisions of Mandangad and Sāl-shi twelve, in Khed, Dāpoli, Ratnagiri, Sangameshvar, Vengurla, and parts of Mālvā and Devgad sixteen, and in Rājāpur twenty-four *pāgalis* make one *man*; twenty *mons* make one *khandi*. The heaviness or lightness of grain, its exposure to dryness or damp, or any want of care in heaping the grain in the wooden measure, causes a difference ³ in the rupee weight of a *sher*. Grass, hay, and firewood are sold by head-loads and cowdung cakes by quantity. Milk and oil are sold by capacity *shers*, the milk *sher* weighing thirty and the oil *sher* twenty-nine rupees. For measuring them brass half-*sher* cups are generally used. Cotton and woollen cloth is generally sold by the yard, *var*; silks and brocades by the *gaj* of 2·3 feet to 2·11 feet; and coarse country cotton cloth, *dangri*, by the cubit, *hath*. Waistcloths *dhotars*, robes *sādis*, and blankets *kāmbhis*, are sold in pairs or singly. Bamboo matting is measured by the surface and sold by the cubit, and matted cocconut leaves by the hundred. Cut stones are sold singly or by the hundred, and munt stones by the cart-load. In house-building the owner generally buys the wood, brick, cement, and other materials, and for the building engages masons, carpenters, and other artisans by the day or month. A *bigha* measuring about 4014 square yards was formerly the unit of land measure; it was sub-divided into twenty *pānds*, each *pānd* containing twenty poles *kāthis*, and each *kāthi* 10·0347 square yards. Under the revenue survey, the acre has taken the place of the *bigha*. It contains forty *gunthās* of thirty-three square feet, each *guntha* being divided into

¹ The Ratnagiri *sher* of 28, to 29 rupees weight, the Chaplun *sher* of 30, the Vengurla *sher* of 27½, the Mālvā and Dāpoli *sher* of 28, and the Rājāpur *sher* of 26.

² The weight in rupees of the different grains contained in a *sher* of capacity, is rice 37, *achhar* 47, *bar* 54½, *barid* 41, *oat* 40, and wheat 52½. In different parts of the district these measures vary by one or two *tolas*. Those given above are for the town of Ratnagiri.

³ At Vengurla from Rs. 55 to Rs. 63½, at Ratnagiri from Rs. 49 to Rs. 57½, and at Chaplun from Rs. 50½ to Rs. 65½, the pound.

sixteen *annás*. At present as thirty-four *gunthás* make one *bigha* and 1029 square feet constitute one *guntha*, the modern *bigha* contains about 37,021 square feet. Jack fruits, plantains, cocoanuts, limes, sugarcane, water melons and mangoes are generally sold by the quantity. A few of them such as limes, mangoes, and cocoanuts are also sold by the hundred. Almonds, cardamoms, cloves, betelnuts, and other spices and drugs are sold by weight, and betel leaves by the quantity or the hundred. Fresh coriander plants, fœnugreek grass, and other vegetables are sold by the quantity. Fish is also sold by the quantity, and mutton by the pound, *sher*. Standard weights and measures are kept in every Mámлатdár's office. In spite of several attempts, it has been found impossible to introduce a uniform system, and with the present great local variations convictions for the use of false measures are almost unknown.

Chapter V.**Capital.****Weights and Measures.**

² Of the Ratnágiri Sahyadri passes, soon after the beginning of British rule

At the beginning of British rule (1818-1820) carriage was almost entirely by water. The Government grain stores, the chief centres of local traffic, were all near the banks of creeks, and from no part of the district, except where water carriage was at hand, was forest produce gathered and exported.¹ In rugged parts near the coast private charity had in places hewn rough flights of red stone steps; but they were much damaged and out of repair. In the Parashram pass between Chiplun and Dabhol, there had once been a good made road paved where the ascent required it. But the pavement was (1824) in so bad repair, that cattle chose a winding pathway to the right.² Besides the steps in the rugged places near the coast, the only trace of roadmaking was, after the rains, the yearly repair of the

(1826), Captain Clunes (Itinerary, 147) has left the following details:--HATLOT, seven miles south of Par and leading from Makirangad fort to Khed, was little used; neither the pass nor its approach was practicable for carriages. AMBAVALI, nine miles south of Hatlot, the line of route from Sátara to Khed and Dapoli, was passable but hard for cattle which in places had to be unladen; from the west mouth of the pass, the whole way to Khed was extremely bad and still worse to Papoh. NORTH TIVRA, about half way (23 miles) between Sátara and Chiplun, though used by Vanjaris and others, was hardly practicable for loaded cattle; the fourteen miles from Tivra and Chiplun were very bad. KUMBHARLI, about 13½ miles south of Tivra, winding, long, and of easy ascent, though generally rocky and bad, was the best in that part of the range; it had lately been repaired and was the high road from the coast to Karhad, Sátara, Sholapur, and other places. MALA, about nine miles south of Kumbharli, was about three miles long, leading from Karhad in Sátara to Makhan. SOUTH TIVRA, six miles south of Mala, was exceedingly steep for two miles, the road running up a river bed; this was a route between Sangameshvar and Miraj. KUNDI, five and a half miles south of Tivra, was a bad pass. AMBA, eleven miles south of Kundi, led from Devrukh to Kolhapur and Miraj; Vishalgad fort at the mouth of this pass divided it into two, Devára on the north, unpracticable for cattle, and Prabhavali on the south, little used except by people going to Vishalgad. ANASKURA or ANSKURA, nine miles south of Amba, was the direct road from Karhad to Malvan, and the usual route from Miraj to Rajapur and Kharepatan; though in no part passable to wheel carriages, the road was good and in steep places paved with large rough stones; it was much used by Vanjaris; the approach from the Konkan side was very bad, but a little labour might make it practicable for guns. KAJIRDA, the straight road between Kolhapur and Rajapur, formerly passable to laden cattle, was stopped. BAYDA, about seven miles north of Shesgad, also a route from Kolhapur to Rajapur, a road for foot passengers, was frequented by laden cattle. SHESGAD, about six miles north of Honda, from Kolhapur to Malvan, frequented by cattle, was out of repair; formerly guns had been brought up it. PHONDVA, the direct line from Kolhapur to Malvan, one of the easiest passes to the Deccan, had a few years before been made practicable for ordnance; with little labour it might be put in good repair; it was not much used. GHORGNA, the route from Kolhapur and Miraj to Malvan, though bad near the top, was much used by cattle. RANGNA, or PRACHITGAD, was frequented by laden cattle from Kolhapur to Malvan. HANUMANT, or TALUKAT, was a very bad cattle road; the Konkan mouth was four miles from Binda. AMBOLI, or PÁRPOLI, stony and in no part very steep, was from zigzags difficult for heavy ordnance; it had been used by Colonel Dowse when going to invest Redi (1818); in three days the pioneers made it passable for small guns; merchants from Goa to the Deccan went along this road. RAVI was the great pass to the upper country from Vadi, Malvan, Vengurla, and Goa. The approach to the pass, both above and below, was a made road, the ascent easy and passable for every sort of carriage. The general breadth of the new road, finished in March 1821, was thirty feet. Before this time, in 1790, two detachments of troops on their way from Sangameshvar to Dharwar passed through the steep Amba pass, on which some trouble had been taken. Light baggage and good weather enabled them without much difficulty to go up the pass in a day. Operations, Little's Detachments, 2 & 11.

¹ Mr. Dunlop (1824), Rev. Rec. 121 of 1825, 79-81. The chief forest products were firewood, gallsnuts, and red *dhuyti*, *Grislea tomentosa*, flowers.

² Mr. Pelly (1820), Bom. Rev. Rec. 16 of 1821, 340.

Chapter VI.
Trade.
Communications.
Roads.

Kumbhárli or Chiplun pass.¹ There were no wheeled carriages, no horses, no camels, and few pack bullocks. All field and other produce was carried to market on men's heads, and during the first years of British rule, the people suffered much from being forced to carry the baggage of military and other travellers.²

For forty years, except the military road from Vengurla through the Rám pass south to Belgaum, and four miles from the Dápoli camp to the Harnai sands, little was done to better the roads. In 1851,³ no attempt had been made to improve even the most frequented lines of traffic. The wear of ages had smoothed them in places, but parts were dangerous to man and beast. Laden animals were jammed between rocks, forced to slide down steep slopes of sheet rock, and, footsore, to pick their way among thickly strewn rolling stones. Carts were unknown, and between many villages and their market towns were not even bullock paths. Their whole produce went to market on men's heads.⁴ The hill passes were uncared for, and no heavy weights could pass up or down unless slung on poles, *navghans*, carried on men's heads. Rough roadmaking was easy. The three main lines of local traffic, running north and south, along the coast, in the centre, and near the Sahyádrí hills, might be cleared at a very small cost. But for twelve years more no money was available. In 1864 the whole length of the district roads was 171 miles, and of this, except eight bridged and drained miles between Dápoli and Harnai, the whole was either unbridged, partly drained, second class roads, or cleared tracks. With the introduction of local funds, the work of roadmaking was pressed on. Since then, partly from general and local funds and partly with the help of the Kolhápúr and Sávantvádi states, roadless Ratnágiri has been covered with a network of good communications including 507 miles of cart-road and several hundred miles of bullock tracks. Such is the carrying power of these roads that in the year (1876-77) of the late Deccan famine, 90,000 tons of food grains passed inland from the coast.

The main district road runs north and south, passing through the chief inland trade centres and crossing the different rivers above the limit of navigation. Starting in the north from Poládpur in Kolaba, and by Kashodi passing through the towns of Khed, Chiplun, and Sávarda, it comes as far south as Hátkhamba. From this, where it is joined by a main line from Ratnágiri, the road stretches south through Páli to Lánja, Rájápur, Khárepátan, and Kásárda. South of Kásárda, the main line has, from local funds, been continued to Vengurla, forming altogether a line of 160 miles of road. In the south, from this main road, local feeders have been carried west to Málvan and Áebra, and cross lines taken through Kudál in Sávant-

¹ Bom. Rev. Rec. 16 of 1821, 621. A few years later (1826), Capt. Clunes says (Itinerary, 147) : 'From Vengurla to the Savitri there are cattle tracks or pathways usually running straight over dry rocky uplands and across tilled valleys, which, as a rule, are ploughed in the rains. Except close to Malvan, Ratnagiri, and other leading places, there are neither carts nor cart roads.'

² Captain Clunes' Itinerary, 63.

³ Capt. Wingate in Bom. Gov. Sel. II, 21.

⁴ Capt. Wingate in Bom. Gov. Sel. II, 22.

vádi to the Párpoli pass road; from Kudál by Dhámápur to Málvan; from Kásárda near the Phonda pass, by Vághotan to Vijaydurg, thoroughly opening that fine stormy weather port; from Kásárda to Jánoli, a short cut; from Ratnágiri to the fine stormy season port of Kálbádevi; and further north, from Chiplun west to Ibhrámpur; from Khed to Dápoli and Harnai on the coast; from Khed to the foot of the Ámbavli pass; from Khed by Pálgad to Dápoli; and from Mahápral on the Sávitrí to Poládpur, connecting the Varanda and Fitzgerald pass roads with an excellent port near the mouth of the Sávitrí. All these are good fair weather cart roads.

At the same time, besides many cross roads along the coast, a good bullock track, nine to twelve feet wide, has been made from end to end of the district.

Besides these roads connecting most district towns with the sea, first class bridged cart roads have been carried through the Kumbhárli, Ámba, Phonda, and Párpoli passes, and the others have been made easier for foot passengers and pack bullocks. Those carried through the Kumbhárli and Párpoli passes are open all the year round, and the rest only in the fair season.

There are seven toll bars in the district, five of them on provincial roads at Vengurla, Chárveli, Vadgaon, Dájipur, and Pophli, and two on local fund roads, at Vengurla and Gimhavna. All are annually sold by auction to contractors. The amount realized in 1878-79 was £5437 (Rs. 54,370) on provincial, and £143 (Rs. 1430) on local fund roads.

Of the few masonry bridges, including an old one in the town of Rájápur, the largest is 114 feet in length, with three spans of thirty feet each, built on the Kutivri river on the Chiplun-Ibhrámpur road at a cost of £1545 (Rs. 15,450).

Besides three district officers' bungalows at Harnai, Vághotan, and Málvan, and nine travellers' bungalows for Europeans, one each at Bánkot, Mahápral (under construction), Harnai, Ratnágiri, Vijaydurg, Vághotan, and Vengurla, and two in the fort of Jaygad, there are in all seventy-five rest-houses, *dharmashálas*, for the accommodation of native travellers. Of these, nine, one each at Dápoli, Vákavli, Burondi, Mahápral, Anjarla, Dábhil, and Bánkot, and two, one at the wharf and one in the town of Harnai, are in the Dápoli sub-division; three, at Khed, Dábhil, and Kashedi, are in the Khed sub-division; fourteen, one each at Sávarda, Chiplun, Shirgaon, Ibhrámpur, Khershet, Govalkot, Anjanvel, Adur, Tavsal, Guhágar, Hedvi, and Kudavli, and two at Pálshet are in the Chiplun sub-division; seven at Navdi, Mábhala, Murshi, Aravli, Asurda, Dábhil, and Phungas, are in the Sangameshvar sub-division; sixteen, one each at Páli, Naniz, Nivli, Hátkhamba, Anjanari, Varavda, Vetoshi, Purangad, Vijay, Malgund, Harcheri, and Jaygad (fort), and four, two at the wharf and two in the town of Ratnágiri, are in the Ratnágiri sub-division; ten, one each at Vaked, Lánja, Veral, Karavli, Barsu, Ovi, Jaytápur, and Bhálávli, and two in the town of Rájápur are in the Rájápur sub-division; eight, at Phonda Talera, Phanasgaon, Khárepátan, Pátgaon, Kankavli, Karul, and

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Devgad, are in the Devgad sub-division ; six, one each at Tárkarli, Masda, Pendur, and Sukalvád, and two, one at the wharf and one in the town of Málvan, are in the Málvan sub-division ; and two, one at the Vengurla wharf and one at Parula, between Málvan and Vengurla, are in the Vengurla sub-division.

Ferries.

Some of the creeks are fordable at low water, while on others and on some of the rivers, public ferries are kept for the conveyance of goods and passengers. Of the forty-three district ferries, three work during the rainy season, and the rest throughout the year. Five of them are maintained by local funds. Of the whole number, four are in Málvan, five in Devgad, six in Rájápur, ten in Rátnágiri, seven in Sangameshvar, three in Chiplun, and eight in Dápoli. The total revenue in 1878-79 amounted to £874 16s. (Rs. 8748).

Steamers.

The sea traffic is carried on partly by steamers and partly by sailing vessels. Coasting steamers are of two kinds, a small class of passenger vessels known as the Shepherd Company steamers, varying in size from 160 to 199 tons, and the larger ships of the British India Steam Navigation Company of from 1941 to 2661 tons. Of the Shepherd steamers, some belonging to the Bombay ferry service, and known as the Dharamtar steamers, come only as far south as the Bánkot river, taking from eight to nine hours in their passage from and to Bombay. The others, new vessels of light draught, go as far south as Goa and call at almost all Ratnágiri ports. Including stoppages, they generally take from twenty-four to thirty-six hours between Vengurla and Bombay. None of these vessels ply between the end of May and the middle of August. The larger class of steam-ships, belonging to the British India Steam Navigation Company and carrying the mails, are coasting traders going as far as Madras and Calcutta. They sail once a week, and calling only at Ratnágiri and Vengurla, generally make the passage between Bombay and Vengurla in twenty-four to thirty hours. During the stormy season they call at the sheltered creek of Kálbádevi, the harbour for the town of Ratnágiri. Taking piece-goods and stores from Bombay, they bring by the return voyage large quantities of cotton from Vengurla and Ratnágiri. Their passenger traffic is very limited.

Sailing Vessels.

Of sailing vessels there are two classes, foreign and local. The foreign ships are Arab *dans*, belonging to Gwadar, Huma, and Chába, vessels of from seventy-five to 150 tons burden, with two masts and two or three sails, and a crew of a captain, *sarang* or *tánde*, a *nákhoda*, a carpenter, and twenty seamen. Besides meals, the seamen get from 16s. to £1 (Rs. 8-10), and the others from £1 to £1 10s. (Rs. 10-15) a month. Of late years, few vessels of this class have visited the Ratnágiri ports. Their owners, generally also their commanders, are mostly Arabs and Indian Musalmáns. They generally come from Arabia to Jaytápur about the end of October, bringing dates, raisins, almonds, pistachios, and mats, stay in some Ratnágiri port for about two weeks, load with gallnuts, hemp, turmeric, and groundnuts, and then sail to Malabár or Bombay to fill there. The captains are generally good sailors and men of much intelligence, guiding their ships by the help of the compass and the

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quadrant. Though they avoid the roughest season, they often weather very heavy storms.

Of local sailing craft the chief varieties are, besides canoes and fishing boats, the *shibádi*, the *phatemári*, the *mhúngiri*, the *machva*, and the *padáv* or *baláv*.

Besides a few English jolly boats in Vengurla the small boats in use are three, the *ulándi*, the *pagár*, and the *don*. During the stormy months small boats of more than a quarter of a ton (one *khandi*) burden are drawn up the beach and thatched; the rest are used in rivers for fishing and other purposes. The boat in commonest use is the *ulándi*, so called from the balance float that, joined to the boat by two spars, lies on the water from six to ten feet from the boat's side. *Ulándis*, varying in length from ten to eighteen feet, have one mast and one lateen, *parbhán*, sail. The *pagár* and the *don* are *phatemári* and *machva* row boats. The *pagár*, a hollowed mango trunk, is used either with or without the balance spar, *ulándi*. The long flat-bottomed *don*, made of *undi*, *Calophyllum inophyllum*, wood, with, instead of nails, well oiled and dammered hemp and coir yarn fastenings, is seen only in Vengurla. It is the best boat for landing horses. Fishing boats are generally provided with two pairs of wooden buoys and their moorings. The *shibádi* is a large vessel from 100 to 300 tons, generally found in the Ratnágiri sub-division ports. The *phatemári*, a deep narrow vessel of great speed and an excellent sailer, is from twenty-five to forty-five feet long and from 25 to 100 tons burden. It has two masts and three sails, two yard sails, *parbhán*, and a jib. The *mhúngiri* or *suvála* is like the *phatemári*, but smaller and from ten to twenty-five tons burden. The *machvás* and *padávs* or *balávs* of a broader and flatter build are from twelve to twenty-five feet long and from $2\frac{1}{2}$ to ten tons burden. All have two masts and three sails. Except that only *phatemáris* carry unpressed cotton bales, all take both cargo and passengers.¹ Besides for coast trading, the smaller *machvás* are often used for deep sea fishing.

These vessels are owned by Bhátíás, Gujars, Lohánás, Musalmáns, Pársis, and fishermen either Hindus, Gábits, Kolis, and Khárvis, or Musalmáns of the Konkani and Dáldi classes, and sometimes by Bráhmans. Fishermen anxious to own a boat, generally join two or three together to form a fishing or trading partnership and borrow capital from some Bráhman or Musalmán moneylender. The strength of a *shibádi's* crew is, besides the captain, *tándel*, from twenty to twenty-five, of a *phatemári's* from fourteen to eighteen, of a *mhúngiri's* from eight to ten, and of a *machva's* from five to seven hands. Kolis, Bhandáris, Gábits, Bhois, Khárvis, and Musalmáns, the seamen, mostly natives of Harnai and Vengurla, generally belong to the caste of the owner or captain. These vessels work only during the fair season, and are entirely laid up during the south-west monsoon. A large *machva*, complete with sails and

¹ The fare by sailing boat from the Ratnágiri coast to Bombay is from 6*l.* to 1*s.* (4-8 *annas*).

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one boat, costs from £100 to £150 (Rs. 1000 - 1500), and a *phatamári* from £120 to £200 (Rs. 1200 - 2000). The shipbuilders are generally Hindu carpenters, Sutárs and Páchkalsis, helped by Gábit fishermen, others are Musalmáns and native Christians. The chief boat-building towns are Ratnágiri, Jaytápur, Málvan, and Vengurla, and to a less extent Bánkot, Jaygad, and Anjanvel. In 1830, when the teak forests were made over to the Khots, shipbuilding became an important industry. This did not last long. The stores of timber were most wastefully spent, and the district left stripped of trees. At present the timber most used in shipbuilding is, besides Malabár teak, the local *bantek* or *nána*, jack, mango, and the light *dhup* tree. A lucky day is chosen for beginning to build and for launching a vessel. At the time of launching, the vessel is worshipped, decorated with flags and flowers and among Musalmáns with *sabja* leaves, and named¹ according to the position of the stars. With music and a company of friends the vessel starts for some miles on a trial trip, the guests being treated to toddy and betelnut. Bráhmans get gifts and the shipbuilder a turban. Repairs are generally done by one of the sailors, who is a carpenter and keeps a set of tools. The vessels last from forty to fifty years. Besides his meals, each sailor gets from 1s. to 16s. (Rs. $\frac{1}{2}$ - 8) a voyage, or an average monthly pay of from 4s. to 8s. (Rs. 2 - 4). The captain, when not the owner, gets twice as much as the seamen. Liquor is not generally allowed on board, but some tobacco is always taken. Presents, *ináms*, of waistcloths, turbans, or money are sometimes, though not often, made. The smaller craft generally anchor at night, and do not go out of sight of the Sahyádrí hills. But the better class of *shibádis* and *phatamáris* go about twenty-five miles from the coast, sailing out of sight of land from ten to fifteen days at a time. Some of the captains understand the compass, though in their coasting voyages they trust almost entirely to their own and their crew's local knowledge. Out of sight of land, they steer by the sun, moon, and stars.

Trade is chiefly carried on with Malabar, Bombay, Cutch, Káthiáwár, and Arabia. Of late years, steamer competition has forced sailing vessels to lower their rates. Shipowners' profits have declined, and few new vessels are now built.

Light Houses.

There are four light-houses, one each at Ratnágiri and Jaytápur, and two, the port and the rock light-houses, at Vengurla. The Ratnágiri light-house, north latitude $16^{\circ} 59'$ and east longitude $73^{\circ} 15' 47''$, in the Ratnágiri harbour, is a masonry tower of thirty-seven feet on a headland about 210 feet high. Dioptric, of order three, it is a single fixed red light, visible from the deck of a ship eighteen miles off, and lightening an area of 108 square miles. The Jaytápur light-house, north latitude $16^{\circ} 36' 10''$ and east longitude $73^{\circ} 18' 30''$, on the south point of the Rájapur hill, is a masonry tower of twenty-one feet on ground about fifty feet above high water level. Dioptric, of order six, it is a single fixed white light

¹ The commonest names are Lakshmi-prasad, Gangaprasad, and Daryadaulat.

visible from the deck of a ship $7\frac{1}{2}$ miles off, and lightening an area of $56\frac{1}{2}$ square miles. The Vengurla port light-house, on the north point of the bay, is a masonry tower of twenty-four feet on a headland 186 feet above high water level. Dioptric, of order six, it is a double (one above the other) fixed white light visible from the deck of a ship nine miles off, and lightening an area of fifty-four square miles. The Vengurla rock light-house, north latitude $15^{\circ} 53' 17''$ and east longitude $73^{\circ} 26' 43''$, on an isolated rock, one of the Burnt Islands, about five miles south of Málvan, is a thirty feet masonry tower on a hill about eighty feet above high water level. Dioptric, of order four, it is a single fixed white light, visible from the deck of a ship twelve miles off, and lightening an area of seventy-two square miles. The swell makes it at all seasons difficult to land on the light-house rock, and in the south-west monsoon communication with the mainland is entirely cut off. Provisions and stores have to be laid in before the close of the fair weather.

The Ratnágiri district, forming part of the Konkan postal division, contains, besides the receiving house in the town of Ratnágiri, thirty-nine post offices. One of these at Ratnágiri, the chief disbursing office of the district, is in charge of a postmaster drawing a yearly salary rising from £90 to £114 (Rs. 900 - 1140); three head offices at Chiplun, Dápoli, and Rájápur are in charge of deputy postmasters, each drawing £48 (Rs. 480) a year; fourteen sub-offices at Anjanvel, Devgad, Devrukh, Guhágar, Jaytápur, Kankavli, Khed, Lánja, Malgund, Málvan, Masura, Sangameshvar, Shiroda, and Vengurla are in charge of sub-deputy postmasters, each drawing from £18 to £48 (Rs. 180 - 480) a year; and twenty-one branch offices at Áchra, Adivra, Anjarla, Bánkot, Dábol, Dhámápur, Harnai, Kelshi, Khárepátan, Mákhjan, Mandangad, Murud, Nevra, Pálghar, Pálshet, Pávas, Pendur, Sávarda, Sukalvádi, Vághotan, and Vijaydurg are, except the Harnai office which is entrusted to the village schoolmaster, in charge of branch postmasters, each drawing from £12 to £14 (Rs. 120 - 140) a year. In the chief towns letters are delivered by twenty-one postmen, each drawing a yearly salary of £12 (Rs. 120). In some places postal runners do the work, getting besides their salaries from £1 4s. to £2 8s. (Rs. 12 - 24). Fifty-four village postmen, drawing from £9 12s. to £12 (Rs. 96 - 120) a year, deliver the letters in the surrounding villages. The post offices in the Konkan division are supervised by an inspector with a yearly salary rising from £480 to £600 (Rs. 4800 - 6000), assisted by a sub-inspector drawing a yearly salary of £114 (Rs. 1140). The Dharamtar ferry steamers carry the mails from some of the seaport towns. The Southern Marátha Country and the Deccan mails pass by foot runners along three different routes from Vengurla through Kudál to Belgaum, from Rájápur to Kolhápur, and from Chiplun to Karhád. During the fair season, letters are sometimes and heavy parcels are always sent by the weekly steamer to Ratnágiri and Vengurla.

Hitherto there has been but one telegraph station, Vengurla, which, at the extreme south and many days distant by post from the more important towns, has been of little use. The question of extending

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a telegraphic line into the north part of the district and especially to Ratnágiri, Rájápur, and Chiplun, after many years' discussion, has at last been solved by the enterprize of the district local fund committee and the municipalities of the three towns named, which have jointly guaranteed to the Government of India the requisite five per cent on the cost of a main line from Kolhápur to Ratnágiri through the Ámba pass, with two branches from Ratnágiri to Chiplun on the north and to Rájápur on the south. The total number of messages at Vengurla in 1878-79 was 2390, 229 of them Government and 2161 private.

TRADE.

Early.

As has been noticed under the head of "History," the Greek and Roman writers in the early centuries of the Christian era, though they knew the names of marts on the Ratnágiri coast, had no direct dealings with them. The writer of the *Periplus* (247) calls them local trade centres,¹ and mentions that corn, rice, butter, sesamum oil, coarse and fine cotton goods, and sugarcane were sent from them sometimes to Africa and sometimes to Arabia.² No further notice of the trade of the Ratnágiri ports has been traced, till in the fifteenth century, under the Báhmani, and afterwards under the Bijápur kings, mention is made of a great trade through the Ratnágiri ports, the import of horses being specially noticed.³

**Sixteenth
Century.**

In the sixteenth century the Ratnágiri ports were frequented by three sets of merchants, Moors, probably including Arab and Persian as well as Indian Musalmáns; Gentus, probably Malabár, Konkan, and Deccan Hindus; and Gujarátis, Hindus from Gujarát. The sea trade was carried by two classes of vessels, large ships from Mecca, Aden, and Ormuz, and smaller coasting craft from Cambay and Diu in the north and Malabár in the south.⁴ Inland, the chief trade routes were up the Bánkot river, by the town of Mahád and from Dábhól, Chiplun, and Khed through the Ámbavli pass to Bedar.⁵ Late in the century, the change of capital to Bijápur transferred much of the trade to another route up the Muchkundi river by Sátavli through the Ámba or Vishálgad pass, by Kolhápur or Panhála to Bijápur and Golkonda.⁶ A third route from the coast to Bijápur lay from Jaytápur and Rájápur through Bávda and Kolhápur.⁷ Of imports, there were, from the Red Sea and Persian Gulf, copper, quicksilver, vermilion, and horses; from the Malabár coast, cocoanuts, betelnuts, spices, copper, and quicksilver; from places along the Konkan coast, salt; and from the Deccan and Karnátak, wheat and fine cotton cloth. The exports were, to Gujarát, the copper and quicksilver brought from Arabia and the Malabár coast; to Malabár,

¹ ἐμπορία τοπικά. Vincent's Commerce of the Ancients, II. 428.

² Vincent's Commerce of the Ancients, II. 282, 423.

³ A. Nikitin (1468-1474). Major's India, XVth Century, 20-30. Marco Polo's (1290) account of the Konkan probably refers to Thana rather than Ratnagiri. He says there is no pepper or other spices, but plenty of brown incense, much traffic and many ships with exports of leather, bukram, and cotton, and imports of gold, silver, copper, and many horses, no ship going without them. Yule's Marco Polo, II. 330.

⁴ Stanley's Barbosa (1514), 71, 72.

⁵ Nairne in Ind. Ant. II. 287.

⁶ Nairne in Ind. Ant. III. 318.

⁷ Nairne in Ind. Ant. III. 520.

wheat and cotton cloth brought from the Deccan, and vegetables grown in Ratnágiri; and to the Red Sea and Persian Gulf, great quantities of cloth and cocoanuts, pepper, and other spices and drugs brought from the Malabár coast. Besides these, honey is mentioned as exported from the Bánkot river;¹ pepper as produced in small quantities² (1540) near Dábhól, and as an export from Sangameshvar;³ and cheap rice and vegetables as an export from Khárepátan. Betel was grown in great quantities. The Muchkundi river was so famous for its betel gardens that it was known as the Betel river.⁴ The only local manufacture that seems to have been exported was iron from Sangameshvar.⁵ This trade, which centering in Dábhól had risen to great importance in the early part of the sixteenth century, was, from the refusal of the Bijápur kings to acknowledge their supremacy at sea, greatly harassed by the Portuguese.

In the beginning of the seventeenth century, with the decline of Portuguese power and the increase of trade by the competition of the English, Dutch, and French, Dábhól, Rájápur, and Vengurla again became important centres of traffic. In 1611, when the English first visited Dábhól, they found the merchants almost all Musalmáns, carrying on trade with the Red Sea in ships some as much as 1200 tons burden.⁶ The Dábhól people 'made a noise of' fine cloth, indigo, and pepper, but showed none. They bought some broadcloth, kersies, lead bars, iron, ivory, and indigo.⁷ In 1639, salt and pepper are mentioned as the chief articles of trade at Dábhól.⁸ In 1649, its pepper and cardamom trade was the chief attraction that brought the English company's factory to Rájápur.⁹ In 1660, Vengurla is spoken of as a great place of call for ships from Batavia, Japan, and Ceylon on the one side, and the Persian Gulf and Red Sea on the other. It is said to have been famous for its pepper and cardamoms, and it and other Ratnágiri ports had much trade in calicoes, silks, grain, and coarse lacque.¹⁰

Of the condition of the Ratnágiri district in the seventeenth century (1670), Ogilby writes: 'The rustics maintain themselves with sowing of rice and fishing, on which they live very poorly, inhabiting near the sea shore and the banks of rivers for the convenience of the

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Sixteenth Century.

Seventeenth Century.

¹ Dom João de Castro, *Primeiro Roteiro da Costa da Índia* (1540), 41. He also says wheat and many kinds of food were loaded at Binkot.

² Dom João de Castro, 136.

³ De Coutto, XII. 30; Barbosa, 74.

⁴ Dom João de Castro (1540), 33. Barbosa (1514), 73, says, 'Here in gardens and orchards they grow a great quantity of betel and put it on board small vessels and carry it for sale to other towns and seaports. It is one of the chief revenues of the country.'

⁵ De Coutto, XII. 30.

⁶ Orme's Hist. Frag. 325.

⁷ Middleton in Harris, I. 107, and Saris in Harris, I. 119.

⁸ Mandelslo's *Voyages*, 222. The salt came from Oranubammara, perhaps Uran-Mambái.

⁹ Bruce's *Annals*, I. 344, 357-368.

¹⁰ Tavernier in Harris, II. 360, and Thevenot, V. 249. Hamilton (1700) states (*New Account*, I. 246) that the country round Rájápur formerly produced the finest muslins and botellas in India. This seems to be a mistake, as the fine cloth with gold borders that was shipped from the Konkan ports to Persia is specially mentioned (1634) as brought from the Deccan. O. *Chronista de Tissuário*, III. 221.

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Century.

cocoa trees which grow along the same. People of more ability traffic in pepper, in which the chiefest trade of the country consists, which coming out of Kánara is sent by sea to Persia, Surat, and Europe. They deal likewise in all sorts of provisions; for, this country is the storehouse for all its neighbours. The inhabitants also drive a great trade in calico and another sort of cloth called beirames which being brought by land from Hindustán, Golkonda, and Coromandel is sold to great advantage; for, in most towns are kept weekly markets to which merchants carry their commodities but especially corn and provisions, which are generally brought by a valiant sort of people called Venefars and transported through the whole country of Hindustán which they penetrate with cafilas consisting of three, four, and sometimes eight or ten thousand beasts of burden, accompanied with women and children which follow them like an army.'

Eighteenth
Century.

During the disorders that followed the death of Shiváji (1680) and continued through almost the whole of the eighteenth century, the trade of the district greatly declined. Except the mention of cattle, timber, and hemp, exported from Bánkot, no notice of the eighteenth century trade has been traced.

Nineteenth
Century.

At the time of the transfer of the district to the British (1819) there was very little trade. The staples were an import of salt and an export of grain. Probably no part of India produced so little in excess of the people's wants. Except Rájápur there was almost no permanent place of trade. Along the coast line there was no fixed trade centre, and up the creeks such towns as Chiplun and Sangameshvar had a very small settled population. Merchants, Vánis, Vanjáris, and a few Pársis, came in the fair season and put up light booths very apt to suffer from fire. The great traders were the Vanjáris with their strings of bullocks. But transit dues were high and the hill passes very difficult and in bad order. The chief import trade was in salt. On this the commerce and agriculture of the district depended, because vessels earning good freights for salt were able to take away grain at low rates. Of exports, hemp, inferior to none in the world, had lately been almost stopped by a crushing duty. Hemp fastenings for cotton bales had formerly been one of the chief exports of Fort Victoria now called Bánkot.

The chief exports were rice, wheat, millet, pulse of all sorts, seeds, castor-oil and oil of different kinds, cotton, hemp, yarn, piece-goods, hemp fastenings, tobacco, coffee, betelnuts, cardamoms, gallnuts, turmeric, tamarind, molasses, chillies, onions, garlic, honey, bees'-wax, candles of the same, dried rinds of *kokam* *Garcinia purpurea*, and *rátamba* *Garcinia gambogea*, shark fins, fish maws, bark, sandalwood, timber, planks, bamboos, rafters, baskets, charcoal, and saltpetre. The chief imports were, husked and cleaned rice, wheat, cocoanuts, coir, cocoa kernels, betelnuts, cashewnuts, pistachios, almonds, dates, pepper, ginger, *methi* seed *Trigonella foenum-græcum*, cumin seed, coriander seed, raisins, nutmegs, gallnuts, saffron,

mace, cloves, catechu, assafoetida, opium, sugar, sugarcandy, clarified butter, oil of different sorts, arrack, cotton, China paper and umbrellas, piece-goods, hides, red powder *gulál*, dammer, gum, wax, iron, steel, red lead, brimstone, salt, carbonate of soda *sajjikhár*, sulphate of iron *hirákas*, and ammonia *navságar*.

The average yearly value of the trade could not be estimated. The duties varied at almost all the ports and the system was most complicated. Under the Maráthás, the revenue had been farmed and yielded about £20,000 (Rs. 2,00,000). It was not likely that until the country had somewhat developed, the receipts would much increase.¹

Rájápur, the only place of consequence, had a large body of merchants and was very prosperous with, in 1818, a total trade valued at £75,905 6s. (Rs. 7,59,053) of which £52,688 4s. (Rs. 5,26,882) were imports, and £23,217 2s. (Rs. 2,32,171) exports.² Except Khárepátan, which had a large salt traffic, none of the other towns were of any trading consequence. At Khárepátan, the 1818 trade was valued at £25,170 (Rs. 2,51,700), £9070 (Rs. 90,700) of them exports and £16,100 (Rs. 1,61,000) imports. At Devgad, including a very small return for Áchra, the imports, chiefly salt, were returned at £2614 4s. (Rs. 26,142), and the exports, almost entirely local produce, at £1249 6s. (Rs. 12,493), or a total value of £3863 10s. (Rs. 38,635). At Málvan, the returns represented a total value of £28,579 4s. (Rs. 2,85,792), £23,295 16s. (Rs. 2,32,958) of them imports and £5283 8s. (Rs. 52,834) exports.³ These figures included a very small amount from Vengurla. Its trade as well as the trade of Nivti and Redi was unimportant. The customs rates had been nominally low, four per cent, and at Rájápur, and to some favoured classes, 3 or 3½ per cent. But in addition to this there were many customary charges, and in the Resident's opinion a single *ad valorem* duty of five per cent would be felt by merchants as a relief.⁴

Since 1819, the great increase in population, the abolition of transit duties and miscellaneous cesses,⁵ the opening of four of the Sahyádrí passes for cart traffic, and the change from small fair-weather coasting craft to large steam ships plying all the year round, have greatly developed trade. The chief trading centres on the coast are Bánkot (3763), Harnai (6193), Anjanvel (3285), Jaygad (2442), Ratnágiri (10,614), Yashvantgad (433), Vijaydurg (2331),

1819-1879.

¹ Collector, 15th July 1819. Bom. Rev. Diaries, 142, 2567-2589. Under the Maráthás a class of officers called Dángis and Patkis, in return for grants of land, were expected to help the Government in collecting the customs and in keeping the accounts.

² The chief details were : under imports, husked rice, Rs. 42,375; grain of other sorts, Rs. 25,050 ; betelnuts, Rs. 34,960 ; brimstone, Rs. 10,896 ; cocoanuts, Rs. 29,289 ; cocoa kernels, Rs. 1,66,894 ; dates, Rs. 86,128 ; ginger, Rs. 10,113 ; and incense, Rs. 14,663 ; and under exports, cotton, Rs. 12,107 ; hemp, Rs. 61,015 ; molasses, Rs. 14,262 ; piece-goods, Rs. 51,470 ; salt, Rs. 10,867 ; and turmeric, Rs. 27,077.

³ Of imports the chief items were : unhusked rice, Rs. 16,520 ; cleaned rice, Rs. 1,28,553 ; piece-goods, Rs. 22,690 ; grain, Rs. 16,452 ; and cocoa kernels, Rs. 8377. Of exports the chief items were : hemp, Rs. 17,494 ; piece-goods, Rs. 7929 ; clarified butter, Rs. 5537 ; and coriander seed, Rs. 5017.

⁴ Resident to Government, 31st May 1819. Bom. Rev. Diary, 141, 2311.

⁵ Transit dues were abolished in 1837 and miscellaneous cesses in 1844.

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Devgad (894), Málvan (13,955), and Vengurla (14,996), and inland, Dápoli (2593), Khed (3817), Chiplun (6071), Sangameshvar (3172), Rájápur (5368), and Khárepátan (2900).

The extension of telegraphic communication to Vengurla has revolutionised the trade of that town. When Rájápur and Chiplun have been similarly connected with Bombay and the principal trade centres of the Deccan and Southern Maráthia Country, a like change must also occur in them. The construction during the last twenty-five years of the three main cart roads connecting Chiplun, Rájápur, and Vengurla by the Kumbhárlí, Phonda, and Párpoli passes with the Deccan and Karnátak, has concentrated the traffic and enormously increased the through trade of these ports. At the same time the trade of towns like Sangameshvar, Khed, Khárepátan, and others similarly situated and connected with the Deccan only by difficult bullock tracks has fallen off. The precipitous hill passes by which in old days all the trade was carried on pack bullocks are indeed still open, and to this day a goodly number of Vánis with their strings of bullocks with musically-ringing bells, may be seen slowly toiling up and down the Ámbavli, the Mala, the Ámba, the Anaskura, and the Kájirda passes to and from Khed, Sangameshvar, Ratnágiri Rájápur, and Khárepátan. The goods thus carried are now almost solely for the use of the more or less isolated towns and villages at the foot of the Sahyádrí range. The through traffic between Bombay and the Deccan is no longer entrusted to pack bullocks. Partly also from the same causes the trade of Dábhól, Bánkot, and other once large and important coast towns has almost entirely disappeared.

Traders.

The leading traders are Bráhmans including in Málvan and Vengurla a large number of Shenvis, Parbhus, Maráthás, Bhandáris, Vánis, Gujars, Bhátíás, Shimpis, Khárvis, Gábits, and Musalmáns. Many of them are strangers from Belgaum, Shahápur, Bombay, Cutch, and Jámnagar or Nawánagar in Káthiáwár. Some are capitalists, some trade on borrowed capital, and some are merely agents of up-country or Bombay merchants. The most pushing and prosperous classes who undertake most of the large trading ventures are the Bhátíás and Gujars.

The chief trade by sea is along the western coast of India, south to Malabár and north to Bombay, Káthiáwár, Cutch, and Kurrachee. The bulk of the sea trade centres in Bombay.

Exports.

Besides salt fish, shell lime, cocoanuts, and matted palm leaves, very little local produce is exported either by sea or land. The district, which nowhere grows enough grain for the support of its people, has ordinarily no surplus food produce. The fish is imperfectly cured, often merely soaked in a briny mud and dried in the sun. It finds its way inland and up the passes into the Deccan and Karnátak. Dried shark fins and tails are also sent to Bombay for the China market.

The principal imports for local use are food grains, molasses *gul*, tobacco, chillies, groundnuts, turmeric, clarified butter *tup*, blankets, piece goods, and iron. The staple imported food grains

are rice, *náchni*, and *vari*. Coarse rice is imported in large quantities from Bombay and from the Thána and Kolába districts, any surplus after supplying local demands being re-exported to Zanzibar or the Malabár coast. The coarse hill grains, *náchni* and *vari*, are chiefly imported from the upland, *ghátmátha*, Konkan, the strip of rugged country along the crest of the Sahyádrí range. Through the hill passes, sugar, tobacco, chillies, groundnuts and turmeric find their way from the Deccan, and small consignments of piece-goods and iron come from Bombay. Besides these necessary articles used by all classes, there has been during the last twenty-five years a marked increase in the amount of articles of comfort and ornament brought into and used in the district. Of these the chief are candles, chemicals, clocks and watches, pearls, dyes, fireworks, Chinese and Japanese earthenware, coral, fruit, glass and glassware, hardware, cutlery, jewelry, leather, liquors, matches, metals, oils, stationery, perfumes, silk, soap, spices, sugar, tea, umbrellas, and woollen goods.

Though the exports of local produce and the imports for local use are comparatively small, there is a brisk through trade by which the produce of the Deccan, carried over the Sahyádrí range by good made roads, is shipped at the Ratnágiri ports for Bombay, Zanzibar, Cochin, and other markets. The principal depôts of this through trade are at Vengurla, Rájápur, and Chiplun. The produce thus carried consists of cotton, molasses, food grains, groundnuts, turmeric, chillies, gallnuts, clarified butter, hemp, tobacco, country blankets, oil seeds, and other miscellaneous goods. Very little of the food grains, millet, wheat, gram, and pulse, which thus pass through the district, are consumed locally. Gallnuts, *hardás*, gathered in the Southern Marátha forests are sent to England by Bombay. None are used in the district. Of the remaining articles a small proportion is locally consumed. But the bulk is shipped to Bombay. Reversing the route, the chief articles imported by sea and carried through Ratnágiri to the Deccan and Southern Marátha districts are cotton yarn and piece-goods, silk, glass bangles, sugarcandy, dates, cloves and other spices, cocoanut oil, matches, paper, and metals. In ordinary years, little grain is sent through Ratnágiri to the Deccan and Southern Marátha districts. But in extraordinary seasons, as in the famine of 1876-77, supplies from Bombay, Káthiáwár, and even Sind, were poured into the Deccan districts through all the mountain passes. In the same year, it is said, for the first time large quantities of Ratnágiri grain travelled over the Sahyádrí range. Between the 1st December 1876 and the 30th November 1877, about 150,000 tons of grain left Bombay for the Southern Marátha ports. Of this, during the fair season (December - June), 88,791 tons passed to the famine districts through the ten large Ratnágiri ports, Eánkot, Harnai, Anjanvel, Jaygad, Ratnágiri, Yashvantgad, Vijaydurg, Devgad, Málvan, and Vengurla. Vengurla alone took 51,885 tons.¹

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Trade.

Imports.

Through Trade.

¹ Report by Mr. A. T. Crawford, Collector of Ratnágiri, on the improvement of communications from the seaboard to the Deccan. No. 4430 of 12th Decr. 1877.

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Course of Trade.

The system of trade varies considerably according to the circumstances of the principal commercial towns. The modern system of trade is well represented by Vengurla, while Chiplun and Rájápur are good types of the old fashioned commerce. Vengurla¹ has for many years had a telegraph station connecting the town with Bombay and all the large Southern Marátha marts. A magnificent road has lately been made to Belgaum. The town itself is situated on the sea coast, and for at least fifteen years has been a regular place of call for all coasting steamers.

The submarine telegraph made a great change in the system of trade at Bombay. In former days Bombay firms were obliged to order and to keep on hand large stocks of the staples of commerce. The heads of the large commercial firms lived in Bombay, where their experience and judgment were most wanted. Now no stocks are kept by merchants, and all important business is transacted by wire. The heads of the firms are usually in England, and the operations are directed, as the case may be, from London, Liverpool, or Manchester. Much the same change, on a smaller scale, has been gradually brought about in Vengurla. The trade of this town is now mostly carried on by Bombay merchants and traders in the Southern Marátha Country by means of their commission agents, *daláls*, in Vengurla. These agents are responsible for clearing and despatching consignments as fast as they are received. They are warned by wire of the despatch of the goods, and beforehand provide land or water carriage as required. They keep their clients informed of the ruling market prices, and act on their instructions as to local purchases or sales. It is no longer necessary for the Kánarese trader in Belgaum or Hubli, or Bhátia firms in Bombay, to keep a branch and partners at Vengurla. Even should a visit to Vengurla be occasionally necessary, the regular steamer takes the Bhátia down from Bombay, or the Kánarese trader easily makes the journey by road. Usually the agent, *dalál*, is summoned once or twice a year to Bombay to make up his accounts, and except in the case of a few old established firms whose names are as household words in Southern India, no principals reside at Vengurla.

In Rájápur and Chiplun, at the heads of creeks inaccessible to steamers, with no telegraph, and by post two or three days from Bombay and from two to fifteen days from some of the outlying Deccan marts, trade is carried on in the old fashioned style. Nearly all consignments, whether by land or sea, are made to resident traders, in accordance with their orders. When the consignments arrive, bulk is immediately broken, and the trader sells in lots of any size to any customer or petty traders or to a few paid agents of Bombay firms, who come there simply for the fair season. Thus while in Vengurla a consignment arrives at one end of the town, and within a week passes out unbroken at the other, a consignment to Rájápur or Chiplun is at once broken up and distributed, and

¹ The following sketch is taken from a report by Mr. A. T. Crawford, Collector of Ratnágiri, on municipal octroi duties, dated 7th September 1878.

the part eventually sent to Bombay, does not, from the want of carriage, get clear of the town for two or three months. The merchants, mostly very conservative Bráhmans with a small mixture of Bhátiás, dealing largely in nothing, dabble in everything from cotton to iron nails. At the opening of the fair season, for during the rainy months the sites of the trading camps are often under water, they run up bamboo and matting booths, and pile them full of their heterogeneous wares. Here, like one long fair, they sit and traffic till the next rains break.

Very many villages have no shops. The people go to the nearest local trade centre or market town. The better class of villages, especially those on some line of traffic, have their shop-keeper, generally a Váni, who deals in grain, chillies, molasses, sugar, spices, oil, cocoanuts, betelnuts, and salt. The village Váni buys his stock in trade from wholesale town traders in Vengurla, Málván, Rájápur, Sangameshvar, Chiplun, and Khed, and sometimes from the men who have brought the articles from the Deccan. Except a few Bombay Bohorás and petty Deccan cloth-dealers, who sometimes go from house to house in villages along the main lines of traffic, hawkers are seldom seen. Local religious gatherings do not, to any great extent, affect the trade of the district. Of 103 fairs and markets, the five most important had in 1879 an estimated attendance of 20,600 and an estimated traffic of £19,300 (Rs. 1,93,000).¹

No materials are available to trace the development of Ratnágiri sea trade under British management. The few details that have been obtained show an increase from £104,484 (Rs. 10,44,840) in 1818-19 to £1,841,411 (Rs. 1,84,14,110) in 1878-79. Between 1860 and 1866, the wealth poured into Bombay by the American war greatly raised the Ratnágiri sea trade. In 1870-71, the returns were still as high as £1,931,787. Then as the reaction and fall in prices told, they fell to £1,455,691 in 1874-75. The returns for the next years were unduly swelled by the special grain imports for the famine districts. In 1878-79, trade had again settled to its normal state. The returns show a total of £1,841,411, or nearly £400,000 in excess of the trade of 1874-75. To the total of £1,841,411, imports contributed £793,849 and exports £1,047,562. Under imports the chief items were grain £270,410, cotton yarn £109,090, and piece-goods £104,302; and under exports, cotton £331,738, sugar £257,977, and grain £121,411.

For three years, 1870-71, 1874-75, and 1878-79, comparative figures are available. Comparing the returns of 1870-71 with those of 1878-79, the details show, in imports, a rise in betelnuts from £5798 to £8367, in coir from £2732 to £3162, in cotton yarn from £105,014 to £109,090, in grain from £126,495 to £204,170, and in sugar from £27,861 to £29,791. On the other hand, there is a fall in fish from

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¹ The details are: Chindar, attendance 3000, trade £4000 (Rs. 40,000); Kunkeshvar, attendance 4000, trade £4000 (Rs. 40,000); Mitgaváne, attendance 1100, trade £800 (Rs. 8000); Kelavli, attendance 900, trade £500 (Rs. 5000); and Velneshvar, attendance 11,600 and trade £10,000 (Rs. 1,00,000).

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£28,269 to £6173, in gunny bags from £12,557 to £5029, in liquor from £12,747 to £7665, in metal from £60,896 to £27,080, in piece-goods from £254,535 to £104,302, in salt from £95,938 to £17,153, and in silk from £74,961 to £50,534. Contrasting the exports for the same years there is a rise in grain from £46,769 to £121,411, in betelnuts from £2651 to £8578, in cocoanuts from £5717 to £14,968, in cotton from £249,112 to £331,738, in dyes from £13,078 to £54,169, in clarified butter from £29,583 to £42,794, in oil from £11,078 to £34,172, in seeds from £26,310 to £41,509, in spices from £11,722 to £18,515, in sugar from £223,098 to £257,977, and in tobacco from £5656 to £8861. The chief items of decline are in fish from £11,660 to £2699, in hemp from £44,787 to £731, in salt from £4251 to £1067, and in wood from £16,175 to £1469.

Again, comparing 1874-75 with 1878-79, the returns show in imports a rise in grain from £84,185 to £204,170, in betelnuts from £4078 to £8367, in coir from £2998 to £3162, in cotton yarn from £88,923 to £109,090, in clarified butter from £110 to £549, in hemp from £2727 to £6431, in metal from £22,339 to £27,080, in oil from £36,003 to £42,025, in spices from £8593 to £11,944, and in sugar from £17,522 to £29,791. The chief items of decline are, cotton from £2572 to £137, fish from £14,791 to £6173, gunny bags from £13,137 to £5029, liquor from £10,307 to £7665, piece-goods from £105,755 to £104,302, salt from £72,547 to £17,153, silk and silk cloth from £72,201 to £50,534, and wood from £6286 to £4476. Contrasting the exports for the same years, the returns show an increase in grain from £53,760 to £121,411, in seeds from £32,275 to £41,509, in cocoanuts and kernels from £12,499 to £14,968, in cotton from £255,166 to £331,738, in dyes from £21,776 to £54,169, in clarified butter from £12,730 to £42,794, in oil from £11,216 to £34,172, in spices from £5446 to £18,515, in tobacco from £6789 to £8861, and in sugar and molasses from £166,625 to £257,977. The chief items of decline are fish from £3860 to £2699, hemp from £39,513 to £731, salt from £2281 to £1067, and wood from £19,607 to £1469.

The following statement gives the whole available details :

Ratnagiri Sea Trade, 1870-71, 1874-75, and 1878-79.

ARTICLE.	1870-71.		1874-75.		1878-79.	
	Imports.	Exports.	Imports.	Exports.	Imports.	Exports.
	£	£	£	£	£	£
Betelnuts	5798	2651	4078	6002	8367	8578
Cocoanuts	26,924	5717	31,105	6986	35,272	14,968
Cocoa kernels	26,875	4446	34,073	5113	...	...
Coir	2732	2413	2998	1661	3162	944
Cotton	1236	249,112	2572	255,166	137	331,738
Cotton yarn	105,014	1472	88,923	621	109,090	1006
Dates	16,681	1022	11,039	698	...	...
Dyes	5451	13,078	3836	21,776	3240	54,169
Fish... ..	28,269	11,660	14,791	760	6173	2699
Clarified butter	91	29,583	110	12,730	549	42,794
Grain of all sorts	126,495	46,769	84,185	64,760	204,170	121,411
Gunny bags	12,557	1114	13,137	1436	5029	1157
Hemp and hemp cloth	1968	44,787	2727	39,513	6431	731
Hides	77	672	16	4159	111	4956
Horns	58	1745	146	1778	565	2450

Ratnágiri Sea Trade, 1870-71, 1874-75 and 1878-79 (continued).

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ARTICLE.	1870-71.		1874-75.		1878-79.	
	Imports.	Exports.	Imports.	Exports.	Imports.	Exports.
	£	£	£	£	£	£
Liquor	12,747	26	10,307	...	7665	109
Metal	60,596	3108	22,339	2345	27,080	3264
Oil	48,034	11,078	36,008	11,216	42,025	34,172
Piece-goods ..	254,535	10,123	105,755	9438	104,302	9137
Salt	95,938	4271	72,547	2281	17,153	1067
Seeds	8478	26,510	8427	32,275	8422	41,509
Silk and silk cloth ..	74,961	200	72,201	59	50,534	66
Spices	7233	11,722	8593	5449	11,844	18,515
Sugar and molasses ..	27,561	223,098	17,522	166,625	29,791	257,977
Tobacco	2747	5656	1687	6789	2073	2861
Wood	7827	16,175	6286	19,697	4476	1469
Miscellaneous ..	27,341	215,034	82,866	31,455	106,128	83,785
Total ..	955,765	943,022	741,166	714,525	793,849	1,047,562

The fourteen ports of the district are for customs purposes grouped into six divisions, Suvarndurg, Anjanvel, Ratnágiri, Vijaydurg, Málvan, and Vengurla. The Suvarndurg ports, Bánkot, Kelshi, and Harnai, had, in 1878-79, an estimated total trade worth £124,908, of which £44,430 were imports and £80,478 exports. The corresponding totals were, in 1874-75, £53,642, in 1873, £92,614, in 1871, £156,963, and in 1868, £196,371. BÁNKOT exports, produced mostly in the Dápoli, Mahád, and Mángaon sub-divisions and in some places above the Sahyádris, are husked and cleaned rice, *nágli*, *vari*, wheat, gram, pulse, sesamum, coriander seed, hemp, oil, tobacco, sugar, molasses, onions, garlic, chillies, turmeric, potatoes, betelnuts, gallnuts, groundnuts, fuel, and piece-goods, the last to the Habshi's territory. These exports are sent north to Bombay and Bándra, and south to Vengurla; and husked and cleaned rice and *nágli* to Kálikat. The imports are dried and salted fish, molasses, salt, chillies, earthen pots, sugarcane, cement, oil, clarified butter, palm leaves, coir, and betelnuts from the several Konkan ports; sugar, hardware, copper, piece-goods, and drugs from Bombay; and cocoanuts, cocoa kernels, coir, ginger, pepper, red powder, and wood from Kálikat. These by the Mahád creek find their way to Mahád and thence inland. Of the traders, Bráhmans, Parbhus, Vánis, Shimpis, Bhandáris, Kolis, and Musalmáns, some belong to the place and some are outsiders living in Bánkot only during the trading season (October - May). *Batelos* of from 80 to 100, and *phatemáris* of from 50 to 60 tons from Bombay and Malabár, and *machrás*, *bámboats*, and steamers from several places, visit the port, anchoring about a quarter mile from the landing place. The KELSHI exports, chiefly local produce, betelnuts, timber, and firewood, go to Bombay. The imports, almost entirely for local consumption, are husked rice, *nágli*, coriander seed, molasses, turmeric, onions, garlic, chillies, oil, tobacco, and clarified butter from Ratnágiri ports; salt from Mora in Thána; and wheat, gram, sugar, dates, copper, brass, tin, hardware, and piece-goods from Bombay. *Padávs*, *bámboats*, and *phatemáris* of 20 to 30 tons from Bombay and other places visit the port, anchoring at a distance of 225 yards from the

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landing place. At HARNAI, betelnuts grown in the place and sent to Bombay are the only exports. The imports, almost all for local consumption, are husked and cleaned rice, *nágli*, *vari*, *harik*, molasses, oil, tobacco, chillies, dried and salted fish, and firewood from the several Konkan ports; salt from Uran, Belápur, and Karanja; liquor from Goa; and rice, piece-goods, sugar, copper, and brass from Bombay. Except a few from Ratnágiri and Rájápur most of the traders are natives of the place. *Pudúvs*, *phatemáris*, and steamers visit the port, anchoring half a mile from the landing place.

Anjanvel.

The chief ports of the Anjanvel division are Anjanvel and Borya. The total trade of the Anjanvel division amounted in 1878-79 to £640,101 of which £222,353 were imports and £417,748 exports. The corresponding totals were, in 1874-75, £339,104, in 1873, £590,843, and in 1871, £573,123. The exports were formerly insignificant, chiefly of Konkan grain. In 1879, cotton worth £118,363 and sugar and molasses worth £192,958, and other miscellaneous articles, making a total of £417,748 were exported. The imports are salt, dates, sugar, copper, hardware, silk, yarn, and piece-goods from Bombay; cocoanuts, cocoa kernels, pepper, ginger, coir, and salted fish from Malabár and Goa; and husked rice, *nágli*, and tobacco from Bántot, Revdanda, Pen, and Panvel. Most of these, through the Kumbhárli pass, find their way to Kolhápur, Sátára, and Sholápur. The import traders, mostly Bráhmans, Bhátíás, Gujars, Vánis, and Musalmáns, are native capitalists. *Machrás* and *phatemáris* from Kálikat in the south, and Bombay and even Káthiáwár in the north, visit the Anjanvel port, anchoring about 100 feet from the landing place.

Ratnágiri.

The chief ports in the Ratnágiri division are Jaygad, Ratnágiri, and Purangad. The total trade of the Ratnágiri division amounted, in 1878-79, to £131,805, of which £94,164 were imports and £37,641 exports. The corresponding totals were, in 1874-75, £144,486, in 1873, £126,273, in 1871, £130,605, in 1868, £129,289, in 1857, £15,413, and in 1856, £66,155. The chief JAYGAD exports are husked rice, molasses, and fuel; and the imports, salt, husked rice, cocoanuts, and piece-goods. The RATNÁGIRI exports are cement, fish, and shells; and the imports husked rice, *nágli*, *vari*, fish, and piece-goods. The PURANGAD exports are husked rice, hemp, and fuel; and the imports husked rice, salt, and fish. The imports are brought from Bombay in the north and as far as Kálikat in the south. The exports find their way to Bombay, the several district ports, and Kárwár. Of the imports, husked rice, *nágli*, and cloth are consumed in the division; salt, cocoanuts, and fish find their way inland. The Ratnágiri traders belong to Ratnágiri and the villages near. Those of Jaygad and Purangad are outsiders who stay there only for the season (October-May). Bhandáris, Khárvís, and Musalmáns, some of them have money of their own, and others trade on borrowed capital. *Phatemáris* of from 10 to 80 tons, *shibídis* of from 100 to 250 tons, and steamers visit Ratnágiri and Jaygad, anchoring about a quarter mile from the landing place. At Purangad steamers do not touch, but sailing craft come within a few yards of the shore.

The chief ports in the Vijaydurg division are Jaytápúr and Vijaydurg. The total trade of the Vijaydurg division amounted in 1878-79 to £245,415 of which £107,217 were imports and £138,198 exports. The corresponding totals were, in 1874-75, £234,525, in 1873, £251,230, and in 1871, £305,978. The chief JAYTÁPÚR exports are husked and cleaned rice, *javári*, *nágli*, coriander seed, anise seed, groundnuts, chillies, turmeric, cocoanuts, cocoa kernels, oil, molasses, tobacco, red powder, clarified butter, salted fish, and hemp to Konkan ports; cotton, hemp *ambádi*, gallnuts, molasses, fuel, bamboos, and *shembi* and *ain* tree bark to Bombay; sugarcane and hemp to Goa; husked rice, oil, red powder, chillies, clarified butter, molasses, and hemp to Kumta; husked rice to Beliyápatam; husked and cleaned rice, *javári*, *bájri*, *nágli*, *kulthi*, *udid*, and hemp to Kálikat; rice, wheat, oil, and hemp to Cochin; molasses, leaf dishes, groundnuts, anise seed, turmeric, clarified butter, gallnuts, and hemp to Cutch; molasses, groundnuts, turmeric, and hemp to Maskat; and groundnuts, fishing nets, and hemp to Makrán. The imports are husked and cleaned rice, *nágli*, *vari*, *kulthi*, *udid*, salt, earthen pots, dried rinds of *kokam* *Garcinia purpurea*, hemp, cocoanuts, cashewnuts, palm leaves, betelnuts, gunny bags, cotton, yarn, and piece-goods from other Konkan ports; rice, *javári*, *bájri*, wheat, *methi*, *mug*, *tur*, gram, mustard seed, sugar, drugs, piece-goods, yarn, gunny bags, tin, copper, hardware, and paper from Bombay; cocoanuts, salted fish, and salt from Goa; fuel, arrowroot, dry fish, pepper, chillies, cocoanuts, and cocoa kernels from Kálikat; ginger, oil, yarn, *patang* dye, fish, and saffron from Cochin; coir and dry fish from Bárkur; and *javári*, ochre *geru*, and palm leaf cases *kapáte*, from Cutch. The chief VIJAYDURG exports are gallnuts, molasses, hemp *ambádi*, bamboos, *shembi* bark, and twine to Bombay; molasses, hemp, and *ain* bark to other Konkan ports; sugarcane to Goa; husked rice to Cochin; and husked rice, hemp, and pulse to Kálikat. The imports are husked and cleaned rice, *nágli*, *vari*, millet, wheat, cocoanuts, cocoa kernels, palm leaves, and piece-goods from Konkan ports; piece-goods from Bombay; salt from Mora; husked rice from Antora and Talabdi; salted fish from Goa; and cocoanuts from Kánton in the Portuguese territory. The exports of the division are partly grown in the Konkan, partly brought from above the Sahyádris. Some of the imports are used locally and some find their way to Kolhápúr and other Deccan marts. Except a few who belong to the villages along the creek, most of the traders are natives of Khárepátan and Rájápúr. Shipowners from Bombay and Madras also carry on trade to a large extent on their own account; and Cutch, Káthiáwár, Maskat, and Makrán traders, Hindus, Musalmáns, Christians, Arabs, and Beluchis, occasionally visit the ports. The shipping are *machvás*, *kothyás*, *dangás*, *bagelos*, *phatemáris*, and steamers.

The chief Málvan ports are Devgad, Áchra, and Málvan. The total trade of the Málvan division amounted in 1878-79 to £88,574, of which £46,869 were imports and £41,705 exports. The corresponding totals were, in 1874-75, £77,683, in 1873, £81,639, in 1871, £81,154, in 1867,

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£99,619, in 1850, £43,274, and in 1840, £10,775. The chief DEVGAD exports are hemp, betel leaves, betelnuts, sugarcane, fuel, and bamboos to Bombay; and hemp, fish, and blankets to other Konkan ports. The imports are husked and cleaned rice, gram, oil, hardware, and English piece-goods from Bombay; and husked and cleaned rice, *nágli, vari, harik*, groundnuts, tiles, fish, timber, blankets, cocoanuts, oil, molasses, tobacco, chillies, cocoa kernels, salt, and country piece-goods from the Konkan ports. The ÁCHRA exports are hemp, coir, sugarcane, earthen pots and fuel to Bombay; and husked and cleaned rice, salted fish, timber, hemp, cocoanuts, coir, cashewnuts, betelnuts, and tiles to the Konkan ports. The imports are husked and cleaned rice and hardware from Bombay; and husked and cleaned rice, *járí, nágli, vari*, gram, lentils, peas, groundnuts, coriander seed, oil, tobacco, molasses, timber, salted fish, cocoanuts, betelnuts, salt, and country piece-goods from the Konkan ports. The MÁLVAN exports are rice, linseed, gallnuts, hemp, cashewnuts, dried rinds of *kokam* *Garcinia purpurea*, coir, coir ropes, cocoanuts, chillies, and sugar to Bombay; husked and cleaned rice, wheat, pulse, molasses, cocoanuts, salt, sugar, betelnuts, oil, hemp seed, onions, cashewnuts, palm leaves and tiles to the Konkan ports; cashewnuts and cocoanuts to Honávar; husked rice, clarified butter, and earthen pots to Cochin; onions to Kundápur; husked rice, *nágli*, sesamum, pulse, and onions to Kanánor; husked rice and pulse to Kálikat; and husked rice, molasses, pigs, and oil to Goa. The imports are husked and cleaned rice, millet, *nágli*, peas, lentils, dates, sugar, cocoanuts, and English piece-goods from Bombay; rice, wheat, pulse, gram, peas, coriander seed, groundnuts, chillies, hemp, tobacco, coir ropes, cocoa kernels, betelnuts, sugar, cashewnuts, oil, clarified butter, dried fish, and dried rinds of *kokam* *Garcinia purpurea* from Vengurla; cocoanuts, sweet potatoes, bamboos, candles, and salted fish from Goa; husked and cleaned rice, millet, *nágli, tur*, pulse, cotton seed, cocoa kernels, sesamum, *ajván*, molasses, cashewnuts, salt, and hemp from other Konkan ports; rice and cocoa kernels from Kárwár; rice, cocoa kernels, coir ropes, and dates from Kunta; sesamum, cocoanuts, coir ropes, tobacco, and betelnuts from Honávar; oil, cocoanuts, cocoa kernels, and dry fish from Cochin; pepper, betelnuts, cocoanuts, cocoa kernels, ginger, pepper, and red powder from Kálikat; rice from Mangalor; and cocoanuts from Beliyápatam. The exports are partly local, partly brought from the Vádi state and from different parts of Ratnágiri. The imports are almost all consumed in the division. Rice sometimes finds its way to Malabár. The traders are local Vánis, Gujars, Shenvis, Bhandáris, and Gábits. Most have some capital, while others borrow money at the opening and return it with interest at the close of the trading season. *Muchvás, phatemáris, and kothyás*, and steamers visit the ports, anchoring 200 yards from Málvan, 500 from Áchra, and 300 from Devgad. The local shipping generally ply between Bombay and Kárwár, but they sometimes go as far as Kurrachee in the north and Cochin in the south.

Vengurla.

The only port of consequence in the Vengurla division is Vengurla.

The total trade amounted in 1878-79 to £655,798, of which £314,561 were imports and £341,237 exports. The corresponding totals were, in 1874-75, £298,460, in 1873, £660,781, and in 1871, £683,962. The chief exports are linseed, cotton, gallnuts, hemp, clarified butter, molasses, cocoanuts, cocoa kernels, coffee, hides, horns, betelnuts, chillies, brooms, and wooden toys to Bombay; wheat, gram, clarified butter, molasses, tobacco, onions, and garlic to Goa; rice and other grains, tobacco, country piece-goods, oil, chillies, betelnuts, cocoanuts, cocoa kernels, coir, palm leaves, dried *kokam* rinds *Garcinia purpurea*, onions and garlic to the several Ratnágiri ports; wheat, gram, and coriander to Kárwár; tobacco and molasses to Kumta; hemp and tobacco to Ankola; tobacco, groundnuts, and coriander seed to Dwárka; wheat, gram, and grain to Cochin and Kanánor; clarified butter and gram and other pulses to Mangalor; and rice, coir, and clarified butter to Cutch. The imports are rice, wheat, millet, gram and other pulses, tobacco, piece-goods, yarn, silk, China glass bangles, and groceries from Bombay; husked and cleaned rice, pulse, cocoanuts, cocoa kernels, oil, salt, salted fish, cashewnuts, and red powder from the several Ratnágiri ports; pulse, cocoanuts, betelnuts, salt, salted fish, oil, and cement from Goa; rice, cocoanuts, betelnuts, and timber from Kárwár; cocoanuts, cocoa kernels, oil, ginger, pepper, saffron, and sappan wood, *patang*, dye from Cochin; cocoanuts, oil, and coriander seed from Mangalor; cocoanuts from Beliyápatam, and cocoanuts, cocoa kernels, ginger, dried fish, turmeric, and pepper from Kálikat. Of the exports, cotton, linseed, clarified butter, chillies, and gallnuts come from above the Sabyádris, the others are the products of the Konkan. Of the imports, part are consumed locally and the rest find their way to Belgaum, Dhárwár, Sháhápur, Hubli, Kolhápur, Sankeshvar and the Nizam's territory. Some of the traders are natives and some are settlers from Belgaum, Sháhápur, Málvan, Rájápur, Cutch, and Jámnapur. Shenvis, Bhátíás, Gujars, Vánis, and Maráthás, most of them are agents of large Bombay and up-country firms. The shipping of the port includes *machvás*, *phatemáris*, *kothyás*, *bagelos*, *batelos*, and steamers.

INDUSTRIES.¹

Ratnágiri has never held an important place as a manufacturing district. The artisans employed in the different industries produce, with but few exceptions, only the coarser and commoner articles required by a poor agricultural population. Ruled in past times as an outlying province, with no luxurious court to attract and encourage skilled craftsmen, the district has never had a reputation for fine workmanship in any branch of industrial art. No trade or craft has any tradition attached to its first introduction. Here and there tools of European pattern have been substituted for native ones, but as a rule, the rude implements of ancient days are, without change

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¹ Compiled by Mr. G. W. Vidal, C. S., from notes by Mr. Rangráo Bhímáji, Huzur Deputy Collector.

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or improvement, still used in all the crafts. The raw material, most of it imported from Bombay, is bought by the artisans direct.

The 1878 License Tax returns give a total of 12,003 craftsmen, of whom only 1065 were returned as earning yearly incomes of £10 (Rs. 100) and upwards. The details are :

Ratnágiri Craftsmen, 1878.

CRAFT.	Workmen.	Incomes of £10 (Rs. 100) and upwards.	CRAFT.	Workmen.	Incomes of £10 (Rs. 100) and upwards.
Smiths	2008	263	Tailors	127	13
Carpenters	2559	291	Metal pot makers	370	113
Weavers	901	107	Stone masons	313	62
Spinners	81	9	Knife grinders	6	1
Potters	1438	18	Dyers	8	.....
Barbers	1682	69	Cotton combers... . .	4	... ..
Shoemakers and Curriers	2018	110			
Washermen	848	9			
			Total ...	12,003	1065

Spinning and Weaving.

Cotton yarn spinning gives work to a very limited number in a few villages. The yarn is usually imported ready for weaving. Coarse white cotton cloth, *dangri* or *khádi*, coloured robes, *sádis*, for women, and waistcloths, *dhotars*, for men, are woven for local use by Hindus of the Koshti and Sáli castes. Coarse woollen blankets are also made here and there. In the Ratnágiri jail factory several hand-loom are regularly at work. Various kinds of coarse cotton piece-goods, *sádis* and *dhotars*, are made for local sale. Cotton carpets, towels, napkins, sheets, table cloths, tapes, and similar goods of a serviceable description are also produced in this factory.

Metal Work.

In almost every village gold and silversmiths find employment in making and remaking common ornaments. The workmen show but little skill. Blacksmiths are scarce, forges being found only in the larger towns and villages. There is little demand for their work. Coppersmiths and metal pot makers are also scarce, but judging from the License Tax returns, earn comparatively larger incomes than other workers in metal.

Pottery.

Coarse red pottery for household purposes is made here and there throughout the district. But the trade is not well paid. A rather superior stoneware, chiefly of cups, jugs, and various fancy vessels, is manufactured in the Málvan sub-division, from the porous blue shale found in the villages of Kirlos and Asgani. The owners of the quarries charge those who use them a yearly fee of 2s. 6d. (Rs. 1½).

Horn Work.

Fancy articles of bison's horn are made by a few carpenter families with considerable skill at Vijaydurg, Málvan, and Rájápur. The industry is said to have been started some 200 years ago at Vijaydurg. The horn is imported in small quantities from Malabár and Cochín, the price varying from 2s. to 4s. (Rs. 1 - 2) according to size. The horn is heated on a moderate fire, and to make it malleable is softened with cocoanut oil and wax. The articles made, varying in price from 10s. to 16s. (Rs. 5 - 8), are card trays, inkstands, snuff boxes, cups for idols, decorated with bulls, deer, and cobras, combs, chains, handles for sticks, and different kinds of birds and animals.

The demand for the work, perhaps the only speciality in the district, is very limited and the workers few and much indebted.

Very good cane work, both useful and ornamental, is made at the district jail. Originally confined to a few Chinese convicts, the industry has been continued successfully by Hindu prisoners. Chairs, tables, footstools, tiffin baskets, ladies' work baskets, flower stands, and various other miscellaneous articles are produced.

In 1863, Mr. A. T. Crawford, C. S., then Senior Assistant Judge, established a school of industry, which in the following year, with the aid of the Honourable Rastamji Jamsetji Jijibhai and other leading native gentlemen in Bombay, developed into the Ratnágiri Saw Mills Company Limited. The original cost of the property, including buildings, machinery, and plant, was £12,000 (Rs. 1,20,000). During the share mania time (1863-1864) a large amount of work was executed for railways, reclamations, and other public undertakings, and hundreds of workmen received a regular training. In the crash which followed the share mania, the company was ruined, and the property was sold under a civil court decree for £1200. It was bought in by seven native gentlemen at Ratnágiri, who subscribed a capital of £1700, and until 1877, continued to work it under purely native management. An arrangement was then made with the proprietors by the district local funds committee, to re-establish experimentally a school of industry. After a trial of eighteen months, the school became, on the 1st April 1879, a Government institution, the proprietors parting with their whole interest in the property for £2500 (Rs. 25,000) to be paid without interest, by the district local funds in 12½ years by annual instalments of £200 (Rs. 2000). The school is now governed by a committee consisting of the Collector of the district, the executive engineer, the huzur deputy collector, and the deputy educational inspector. The European manager who lives on the premises is a trained mechanical engineer. He is assisted by a fixed staff of teachers, carpenters, and workmen in charge of the different machines, sufficient to keep the shop going in slack times. Should there be a press of work he engages temporary workmen, to be discharged when no longer needed. The students, about fifty in number, are of all castes and all ages between seven and fifteen. They enter on a month's probation, when, should their work be worth it, they get 2s. (Re. 1) a month, gradually rising as their work increases in value to 16s. (Rs. 8). A boy entering the school ordinarily passes through the following course. He is first placed under the boys' foreman, *mestri*, taught to handle and use the simpler carpenter's tools, and gradually initiated into hand planing, making ordinary mortices and tenons, and the use of the square and foot rule. He then goes under one of the other machine foremen, and is gradually initiated into the use of the different fitting tools, circular saws, tenoning and morticing machines, feet and vertical saws, drilling machines, saw sharpeners, and lathes. During this time he is working in the shop at all kinds of carpentry, and actually using the different machines from time to time in his work. As he advances he is taught practical mensuration by lining out with chalk on the smoothed floor full-sized plans of roofing, scantling door or window frames, or any

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other work then in hand. He is afterwards taught to take out quantities and make estimates, and last of all he is instructed in designs and in the working of the steam engine. In the mornings from seven to nine, and in the evenings from five to six, the boys attend a class under the head master for reading and writing, arithmetic, mensuration, and when sufficiently advanced, practical geometry. The school undertakes wood and iron work of all descriptions for private persons, for the public works department, the district local funds committee, and the municipalities of the district.¹

Salt.

Salt² had hitherto been manufactured at Ratnágiri, Málvan, and Vengurla. At Ratnágiri there were sixteen salt works, *ágars*, at Málvan sixty-nine, and at Vengurla thirty. Except the state works at Shiranda near Vengurla all these have been closed since March 1880. The following table shows for 1878 and 1879, the revenue derived and the quantity manufactured at each station :

Ratnágiri Salt, 1878-79.

STATION.	1877-78.			1878-79.		
	Produce.	Sales.	Duty.	Produce.	Sales.	Duty.
	Tons.	Tons.	£.	Tons.	Tons.	£.
Ratnágiri	233	221	1102	126	141	948
Málvan	2007	897	5204	1510	898	6064
Vengurla	2466	2052	12,055	2635	2886	19,482
Total	4702	3200	18,451	4271	3925	26,494

In Málvan and Vengurla, some of the works belonged to Government, and under certain conditions were every year leased to the highest bidder. The remaining works, including those at Ratnágiri, were owned by private persons, Bráhmans, Bhandáris, and Vánis, who held them either by grant, *sanad*, or lease, *kaul*.

At the beginning of the fair season the manufacturers prepare their pans, *kond*, by ramming the earth with a flat plank until the base is hard and apparently water-tight. In March, April, May, and June, the pans are filled with salt water from a channel cut from the nearest creek. The supply of water is regulated by opening or closing the channel. The pans are filled to a depth of from three to five inches of water. The water is left to evaporate from one to ten days. When the salt has formed at the bottom of the pans, it is raked up, piled in low heaps at the edge of the pan, left to dry for twenty-four hours, and afterwards gathered in one large heap on a raised platform to prevent its being washed by the tide. At the beginning of the rainy season, the heaps are thatched with grass and cocoanut leaves, to be again exposed when the fair weather sets in. When sales are made, the salt is, before removal, weighed on the spot by an official of the salt department, and the duty calculated. The chief sales at Ratnágiri and Málvan were for local consumption and for fish-curing. A considerable quantity of salt from Vengurla is exported by land over the passes into the Deccan. Very little salt leaves the district by sea.

¹ From Mr. A. T. Crawford's Report, 509, 17th February 1879.

² From notes supplied by Mr. R. Thom, Assistant Collector of Salt Revenue.

The bulk of the rural craftsmen hold a position in no way superior to that of the ordinary cultivators. Few save, many are indebted, and most live from hand to mouth. Their houses range in value from £1 to £20 (Rs. 10 - 200), their stock in trade of metal pots or ornaments from 10s. to £50 (Rs. 5 - 500), and their tools from 4s. to £10 (Rs. 2 - 100). Weavers, goldsmiths, and coppersmiths are busy during the marriage season, and slack during the rest of the year. The daily earnings of the lower craftsmen vary from 3*d.* to 6*d.* (2 - 4 *annas*), and of the more skilled workers from 9*d.* to 2*s.* (6 *annas* - Re.1). The craftsman begins at seven in the morning, rests at noon for two hours for the midday meal, begins again at two and goes on till six, or if trade is brisk, putting off the evening meal, he works till nine or even later. Except skilled workmen in the larger towns who hold a better position and are occasionally able to lay by money, artisans as a class are more improvident and more given to drinking and gambling than cultivators.

There are no trade guilds, *mahájans*, in the district, and consequently little or no trade influence. Some of the larger towns have officers styled *shetes*, whose duties in past times appear to have corresponded closely to those of the Gujarát trade guilds. These *shetes* were hereditary officers, enjoying certain rights, privileges, and perquisites, and with respect to the market, *peth*, held a position similar to that held by the *pátils* in the rural portions of the towns. The position of the *shetes* has been gradually lost, and their office has become nominal. They are occasionally consulted about prices and measures, but their decisions carry little weight.

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CHAPTER VII.

HISTORY.

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History.
Early Hindu.

THE Chiplun and Kol caves show that, about the beginning of the Christian era (B.C. 200 - A.D. 50), north Ratnágiri had Buddhist settlements of some importance.¹ About a century later, it formed part of the territory of Rudradáman, the Mahákshatrap whose dominions included Sind, Márwár, Gujarát, Málwa, and the Konkan as far south as north Kánara.² Though shunned as the Pirate Coast, the district contained several places of trade known to the early European writers (A.D. 57 - 247).³ At the end of the sixth century the south of Ratnágiri was held by the Chálukyás,⁴ and in the seventh (about 634) they drove out the Mauryás 'as a wave of the sea drives out the watery stores of pools.'⁵ During the latter part

¹ The Kol caves in the north are given by Mr. Burgess (Rockcut Temples, 13) at between B.C. 200 and A.D. 50, and as the Mahád and Kuda series on the north and those at Karbád on the south-east are said to be of about the same age, the Chiplun caves, which are of much the same character, probably date from about the Christian era.

² Rudradáman ruled between 70 and 100. The era is uncertain, but it probably is the Shak era, A.D. 78 Ind. Ant. II. 93. and VII. 257-263.

³ The places mentioned on the Pirate Coast, within present Ratnágiri limits, are, by Pliny (77), Sigerus and Nitrias; by Ptolemy (150), on the coast, Mandagara, Byzantium, Chersonesus, Milizigeris, Armagara, and Nitra, and inland, Olochœra and the metropolis Musopalle (Bertius, 198, 205). Those mentioned by the author of the Periplus (247) are all on the coast, beginning from the north, Mandagara, Melizeigara, Byzantium, Toparon, and Turannosboas (Vincent, II. 427, and McCrindle, 129). Almost none of these names have been identified. Mandagara seems to have been on the Bántot creek, either near the hill fort Mandangad, or at the mouth of the river, where on the right bank, Barbosa (1514) places a Mandabad and where there still are a Kol Mándla and a Bág Mándla. Milizigeris, Melizeigara, or Sigerus, an island in Ptolemy and a town in Pliny and the Periplus, may be the town-island of Mali, Melandi, or Málvan, Zigeris representing the Arabic *Jazirah* (island), a word still known on the Konkan coast under the corrupt form Janjira; Nitrias or Nitra, a place held by the pirates, may, as suggested by Rennel (Memoir, 31), be Nivti; Turannosboas may possibly be a translation of Rájápur; Armagara may be Harnaigad, or if the reading Brahmagar is taken it may be Guhagar, then, as in Portuguese times, known as the bay of Bráhmans; and Byzantium may be a Greek form of Vijayant, the original of Vijaydurg (see Weber in Ind. Ant. II. 148). Of the inland towns, Musopalle may possibly be Mhasla on the Rájpurí creek in Janjira; and as the rock-temples at Kuda on the Rájpurí creek and at Bhája at the foot of Lohgad are probably about the same age as Ptolemy (150), Olochœra may be Lohgad in the Sahyádris about eight miles south-east of Khandála. Other suggestions have no connection with the modern names. They are by Yule, Mandagara at Bántot; by Vincent, Melizeigara at Jaygad; and by McCrindle, Toparon or Togaron at Devgad. Turannosboas is by Muller placed at Achra and by Yule at Bándá or Tirakot. (See McCrindle's Periplus, 129).

⁴ Ind. Ant. VIII. 25, 45. The village of Kochra, *Kochchuraka*, near Vengurla, was granted by the queen consort of Chandráditya, the elder brother of Vikramáditya I.

⁵ Ind. Ant. VIII. 244. It was probably about this time that Karna, a Chálukya from Kolhápúr, established himself at Sangameshvar and built or repaired the temple of Karneshvar. See below, p. 367, 368.

of the ninth and early years of the tenth centuries, Ratnágiri would seem to have been included in the dominion of the Ráthod rulers of Málkhet near Haidarabad.¹ Under the Chálukyás, the Konkan was conquered, about 1025,² by Jay Sinh or Jagadek Malla. For about fifty years it was managed for them by the Silhárás of Goa, and then passed to the Kadambás.³ Early in the twelfth century it was taken by the Yádavs of Devgiri or Daulatabad, one of whom, Sinhdev (1075-1113), is said to have seized Panhála near Kolhápúr and conquered the Konkan.⁴ It remained with the Yádavs only for a few years as it was re-taken under the Chálukya king Vikramáditya IV. (1077-1128).⁵ Towards the close of the century, Vijayárkdev restored the power of the Goa chiefs, and his son Bhojdev, a great builder of forts, with his capital at Panhála near Kolhápúr, is said to have held the whole south of the Konkan to Kárwár.⁶ According to tradition his country was reduced by a Rája named Singin, who dying before his power was well established, it fell into the hands of Marátha chiefs.⁷ In the thirteenth century, these local chiefs were probably subject to the Hoysala Ballálás of Dv́rasamudra in Mysor (1050-1310).⁸

Early in the fourteenth century (1312), Ratnágiri was overrun by the Musalmáns. Dábhól seems to have always been held in strength. But with their head-quarters so far north as Daulatabad, the hold of the early Musalmáns was slight. When (1347) the Bahmani kings established their independence, the change of the capital south to Kalburga made the south Konkan its natural seaboard. Dábhól became a great port and was carefully kept in Musalmán hands. Still the inland parts remained unsubdued. In 1377, it is stated that many of the chiefs owned allegiance to the Vijaynagar kings, who at that time held Goa.⁹ During the fifteenth century, the Bahmani kings made three efforts to subdue the south Konkan. In 1429, Malik-ut-Tujjár overran the country and the chiefs agreed to admit Bahmani supremacy.¹⁰ No regular government was established, and only five years

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Musalmáns,
1312-1660.*The Bahmanis,*
1347-1500.

¹ Sulaimán (851) (in Elliot, I. 4) says the king lom of the Balhara begins at the Konkan. Mas'udí (915). Praries d'Or, I. 177, includes Chaul, *Symour*, in the Balhara's dominions. It is doubtful if they stretched any further south. The Ráshtrakutas of Málkhet or Mányakhhet, though an old family (Ind. Ant. VI. 60), did not rise to great power till about 767 (Ind. Ant. I. 209). They spread their sway over the Deccan, Konkan, part of Gujarát, and Central India up to the Vindhya. They remained supreme till, about 970, they sank under Tailap the Chálukya (Ind. Ant. VI. 60).

² Elliot in Jour. R. A. S. IV. 15; Ind. Ant. VIII. 18.

³ Ind. Ant. V. 320.

⁴ Jour. R. A. S. II. 381, in Nairne's Konkan, 19.

⁵ Elliot in Jour. R. A. S. IV. 15.

⁶ Grant Duff, 13; Nairne, 19.

⁷ Grant Duff, 13. According to Jervis (Konkan, 81) these chiefs were the *Páligárs* of Chákán and Junnar in Poona, Ráygad in Kolaba, Panhála in Kolhápúr, Kudál in Sávántrádi, and Sonda in North Kánara.

⁸ Elphinstone, 218.

⁹ Briggs' Ferishta, II. 338. According to Elphinstone (411), the Vijaynagar dynasty, which dates from about 1340, was a new family. But Ferishta (II. 338) says that Krishna Ráy's forefathers had (1377) held the kingdom for 700 years. According to a local tradition Vijaynagar power stretched north to Raygad. Jervis' Konkan, 98. Compare Ind. Ant. III. 194.

¹⁰ Briggs' Ferishta, II. 413.

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later, the chiefs of Ráygad and Vishálgad refused obedience. A second expedition (1436) for a time brought those chiefs to order.¹ But the country was unsubdued, and before many years tribute was again withheld. In 1453, preparations were made for a complete conquest. The forts above the Sahyádris were reduced, and under the guidance of Shirke, one of the beaten chiefs, the Musalmán army marched into the Konkan. For two days they passed along a broad easy road. Then they plunged into valleys 'where the sun never shone, and through passes crookeder than the curly locks of the fair and harder to escape from than the mazes of love'. The commander was struck by dysentery and the wearied troops, unable to form a camp or even to pitch their tents, threw themselves on the ground wherever they could find room. Leaving them in this plight, Shirke went to the neighbouring fort of Vishálgad, and returning with a large body of troops surprised and routed the Musalmáns, slaying, with the general and 500 noble Syeds, about 7000 men.² For fifteen years this disgrace was unavenged. At last, in 1469, the minister Mahmud Gáván marched against the Konkan. The leader of the chiefs was the Rája of Vishálgad (Khelna), who, besides the unavenged insult to the Musalmán arms, had of late, with his fleet of 300 sail, greatly harassed Musalmán trade. Gathering troops from Junnar, Chákan, Kolhár, Dábhól, Chaul, Vái, and Mán, Mahmud Gáván forced the passes and entered the Konkan. Finding them useless, he sent back his cavalry, and with the troops of Dábhól and Kolhár, cut his way through the woods to Vishálgad (Khelna). He besieged it till the rains set in. Then leaving the passes in charge of hardy troops, he withdrew to Kolhápur. Returning next fair season, by bribes and stratagems he gained the fort, reduced the country, and from the Ráy of Vijaynagar,³ captured the fort and island of Goa.

The Bahmani kings did not long enjoy this conquest. In 1484, when the great Deccan nobles began to withdraw their allegiance from Mahmud II., Malik Ahmad, the founder of the Nizám Sháhi or Ahmednagar dynasty (1484-1637), entering the Konkan from the north-east, took several forts⁴ and established his power over part of Ratnágiri. The rest of the district was seized by Bahádúr Khán Giláni, the governor of Goa, who, aiming at independence, tried to secure the whole Konkan coast. In 1493, by the sack of Máhim near Bombay, Giláni brought on himself the wrath of Mahmud Begada of Gujarát (1459-1511). Driven to activity by the threats of the Gujarát king, Mahmud Bahmani gathered a great army, and, near Kolhápur, defeated and slew Giláni. He then, with some of his chief nobles, paid a short visit to Dábhól and for some years more the district continued under his officers.

¹ Briggs' Ferishta, II. 424. The fort is called Sonkhed, and under that name cannot be identified. In 1453, it is again spoken of as Sinhgad (Grant Duff, 27). The explanation seems to be that the Vishálgad chief was known as the Shankar Ráy. See Fer. II. 484. Kháfi Khán (Elliot, VII. 278, 372) calls it Sakhalna.

² Briggs' Ferishta, II. 439.

³ Briggs' Ferishta, II. 484.

⁴ Among them were Mahuli in Thána, Koári in Poona, and Bharap and Páli in Ratnágiri. Nairne's Konkan, 27.

About 1500, in a fresh partition of the Bahmani lands, the commander of Goa agreed to acknowledge Yusuf Ádil Khán¹ as his sovereign, and the whole of the Konkan south of the Sávitri or Bánkot river came under Bijápur. On gaining the south Konkan, Yusuf Ádil Sháh, with Dábhól as the head-quarters of government, took steps to improve the district and bring its waste lands under tillage.² Defeated at Goa by the Portuguese,³ Yusuf Ádil Sháh, refusing to seek their friendship or acknowledge them as rulers of the sea, brought grievous loss on the trade of Dábhól and other coast towns.⁴

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Musalmáns,
1312-1660.
Bijápur Kings,
1500-1600.

The Maráthás,
1660-1818.

For fifty years after the decline of the Portuguese (1600-1650), Bijápur power remained unbroken. But about the middle of the seventeenth century, Shiváji (1658) began to conquer the south Konkan, and in a few years, except that Málvan was left to the Sávants, he had, by building and repairing forts, spread his power over the whole district.⁵ The rise of Shiváji was, to their utmost, resisted by Bijápur and the Janjira Sidi, and the country was the scene of almost unceasing war. Still Shiváji (1674-1680) by introducing a better revenue system and offering the people well paid employment did much to improve the district. After Shiváji's death (1680), Ratnágiri suffered on the land side by Moghal invasions,⁶ and along the coast by struggles among the Portuguese, the Maráthás, and the Sidi.

The Ángriás,
1693-1756.

In 1690, by the capture and execution of Sambháji their ruler, and by the spread of the Sidi's power over Anjanvel and Suvarndurg,⁷ the Maráthás sustained two heavy reverses.⁸ Soon after (1698), Kánhoji Ángria succeeded to the command of the Marátha fleet. A most daring corsair, he attacked vessels of all nations, ravaging the coasts, and leaving unmolested few trading towns from Trávankor to Bombay. At first, Kánhoji's head-quarters were at Kolába. Afterwards (1713), siding with Sháhu Rája, he was

¹ Briggs' *Forishta*, III. 19.

² Details are given at p. 225.

³ Goa was taken by Albuquerque in 1508, regained by a Bijápur officer in 1509, and finally conquered by the Portuguese in 1510.

⁴ Dábhól was thrice sacked, in 1508, 1522, and 1601.

⁵ In 1666, he held the whole coast north of Rajapur; he took Rajapur in 1670, and in 1674 the south up to Goa limits. Orme's *Hist. Frag.* 22, 26, 40; Bruce's *Annals*, II. 37, 38, 43, 48, 57. Jervis (*Konkan*, 92) puts Shiváji's conquest some years earlier. He completed the conquest in 1661, forced the Sávants to submit, built the forts of Redi and Sindhudurg in the south, and repaired the old forts of Vijaydurg, Ratnágiri, Jaygad, Anjanvel, and Suvarndurg.

⁶ Two large well equipped Musalmán forces, in 1681 and 1683, passed through the inland parts of the Konkan. Though both suffered grievously from the country, the climate, and the food, they were unopposed by the Maráthás and wrought much havoc and loss of life. Elliot, VII. 311, 315. Aurangzeb was enraged with Sambháji for helping his rebel son Prince Akbar.

⁷ In 1695, at the mouth of the Rájapur river the Portuguese gained one of their last victories, burning three Maratha ships, the largest of thirty-two guns and carrying 300 men. Nairne's *Konkan*, 78.

⁸ Kalusha, the minister, and his guest Sambháji, in a pleasure house near Sangameshvar, were surprised by Mukarrab Khán from Kolhápúr. Kalusha was wounded and taken prisoner. Sambháji escaped but was found in a temple in the garb of a beggar and carried to Aurangzeb near Poona. Here, refusing to become a Musalmán and reviling the Prophet, his tongue and eyes were torn out, and his head cut off. Elliot, VII. 356, 341.

Chapter VII.**History.**

*The Marathás,
1660-1818.*

*The Ángriás,
1698-1756.*

confirmed in command of the Marátha fleet, and except the Sidi's territory of Dábhól and Anjanvel, was given the whole coast from Sávantvádi to Bombay, and the important inland stations of Pálgad, Rasálgad, Khárepátan, and Rájápur. Encouraged by this increase of power, Ángria plundered the shipping more fiercely than ever, not even respecting the English flag. In 1717, attacked both by the English and Portuguese, he laughed at their efforts. In 1720 a British attempt on Vijaydurg, in 1722 a joint British and Portuguese attack on Kolába, and in 1724 a Dutch expedition against Vijaydurg, alike failed. Till his death, in 1728, Kánhoji Ángria was master of the Ratnágiri seas. Three years later (1731), the inland districts, formally ceded by the Moghal Emperor in 1720, were divided between Kolhápur and Sátára. Except that Ángria continued to hold Vijaydurg and the Sidi Dábhól and Anjanvel, all south of Vijaydurg went to Kolhápur and all north to Sátára.

Kánhoji (1728) left two legitimate and three illegitimate sons. Sambháji, one of the legitimate sons, succeeded his father at Suvarndurg, while the other, Sakhoji, remained at Kolába. Soon after, on Sakhoji's death, in spite of Sambháji's opposition, Mánáji, one of the illegitimate sons, with the Peshwa's help established himself at Kolába. In 1737, with the Peshwa's help he repulsed Sambháji and the Portuguese, and three years later another attack on Kolába was stopped by the English, and Sambháji's fleet was driven south to Suvarndurg.¹

On Sambháji's death (about 1745), his half-brother Tuláji succeeded to the lands between Bánkot and Sávantvádi. Mánáji Ángria at Kolába, obedient to the Peshwa, did not molest the English. But Tuláji, disavowing the Peshwa's authority, seized and plundered all ships he could master, which did not carry his passport.² Though the English and Peshwa's Governments had for many years determined to put a stop to Tuláji's robberies, nothing was done till, on the 22nd of March 1755, under Commodore James, a small squadron started from Bombay. Owing to the delay of the Peshwa's fleet, Ángria's ships escaped. But after three days' battering (April 6th), the four Suvarndurg forts were taken without the loss of a man.³ Suvarndurg was, according to agreement, made over to the Peshwa, and towards the close of the year (1755), the English obtained possession of the Bánkot fort and five neighbouring villages. In the following February, under the command of Admiral Watson and Colonel Clive, a fleet of fourteen sail, with eight hundred European soldiers and one thousand native infantry, was sent from Bombay. Meanwhile, the Peshwa's troops had reduced all Ángria's forts north of Vijaydurg.⁴ On the arrival of the English off Vijaydurg, Tuláji began to treat with the Maráthás. As this was a breach of the last year's agreement, Admiral Watson (February 12th, 1756) attacked the sea face, while Colonel Clive, landing with the troops, invested the fort on the land side.⁵ The siege was pressed with vigour, and

*Suvarndurg Taken,
1755.*

*Vijaydurg Taken,
1756.*

¹ Grant Duff, I. 375, 385, 402.

⁴ Grant Duff, II. 63.

² Grant Duff, II. 59.

⁵ Grant Duff, II. 64.

³ Grant Duff, II. 61.

on the following evening the fort was surrendered and Tuláji made prisoner. During the attack a shell bursting on one of the vessels, set it on fire, and in less than an hour the whole of Ángria's fleet was destroyed. As the Peshwa's officers had, contrary to agreement, treated with Ángria, and as his troops had taken no part in its capture, the English were unwilling to give up Vijaydurg. They offered instead to restore Bánkot. To this the Peshwa would not agree, and in the end it was settled (October 12th, 1756) that the English should give up Vijaydurg, taking in its stead four more villages on the Bánkot creek.¹

Ángria's fall was no deathblow to piracy. The 'Málvans',² that is the Kolhápúr chief and the Sávants, were as troublesome as ever, and under their Admiral Dhulap, the Peshwa's fleets and Raghoji Ángria from Kolába greatly harassed trade.

In 1765, a force under Major Gordon and Captain Watson took the forts of Málvan and Redi. Naming it Fort Augustus, the Bombay Government meant to keep Málvan; but as it did not pay, on his promising not to molest their ships, to give security for future good conduct, and to re-pay losses and charges to the amount of £38,289 12s. (Rs. 3,82,896), Málvan was made over to the Rája of Kolhápúr. Similarly, on his promising to keep the peace and pay a sum of £20,000 (Rs. 2,00,000), Redi was, at the close of 1766, restored to Khem Sávant, the Vádi Desái. The £20,000 (Rs. 2,00,000) were raised by a thirteen years' mortgage of the Vengurla revenues, and to induce the mortgagee, Vithoji Kunti, to advance the amount, Mr. Mostyn, besides procuring two Vádi hostages, was obliged to promise that a small factory should be established at Vengurla and the English flag hoisted.³ The hostages escaped, and the mortgagee's agents were driven from their revenue stations. At the end of thirteen years, though they had prevented the mortgagee from recovering the revenue, the Sávants demanded the district. This was refused, and Vengurla was attacked and taken (4th June 1780), with a loss to the English of much private and some public property.

Proud of this success and of the marriage of Khem Sávant with the niece of Mahádáji Shindia, the Sávants renewed their piracies, and joined by the Kolhápúr fleet, caused grievous losses to trade. In 1792, finding that an expedition was organised to punish him, the Rája of Kolhápúr offered to indemnify all who had suffered from his piracies, and to allow the Company to establish factories at Málvan and Kolhápúr.⁴ These terms were accepted; but next year the complaints of traders were as bitter as ever. Meanwhile, in 1785, war broke out between the Sávants and Kolhápúr, and with varying success lasted for twenty-three years. In 1793, except Málvan, the whole of the south coast was in possession of the Sávants. In 1806, Kolhápúr took Bharatgad or Masura and Nivti, and in return

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History.

The Maráthás,
1660-1818.

'The Málvans'.

¹ Grant Duff, II. 70.

² The English gave them this name from their head-quarters at Málvan fort. See Chapter XIV (Málvan).

³ Grant Duff, III. 70.

⁴ Grant Duff, III. 72.

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The Maráthás,
1660 - 1818.

the Sávants wasted the country, re-took Nivti and Redi, and laid siege to Bharatgad. Coming in strength, the Kolhápúr troops raised the siege and carried the war into the Vádi territory. At Chaukal, a pitched battle, ending in favour of Kolhápúr, was followed by the siege of Vádi. But Lakshmi Báí, the regent of Vádi, by inducing Siddojiráv Nimbalkar of Nipáni to enter their territory, forced the Kolhápúr troops to retire. Next year (1809), Phond Sávant, the new Vádi chief, defeated by Mánsing Pátankar the Kolhápúr general, was pursued and his lands laid waste as far north as Rájápúr. In 1810, the Kolhápúr troops were again forced to leave the Konkan, and Redi and Nivti fell into the Sávants' hands.

Meanwhile the Peshwa's power was waning. His forts were out of order, and when, in 1802, he fled there from Holkar, Suvarndurg was found unfit for defence, and Bájiráv was forced to seek shelter with the English. As one consequence of the treaty of Bassein (31st December 1802), an English fleet in 1803 attacked and, on the Peshwa's behalf, took the fort of Suvarndurg from one of his revolted officers.

*Cession of Málvan,
1812.*

Piracy was still unchecked. The Kolhápúr chief's promises had proved worthless. It was clear that trade would never be safe until the British held some forts and harbours near Málvan. With this object, in 1812, as part of the settlement between the Peshwa and the southern Marátha Jágirdárs, the Rája of Kolhápúr ceded to the British Government the harbour of Málvan, including the fort and island of Málvan or Sindhudurg and its dependencies. He also agreed to give up piracy, to allow no armed vessels to leave or to enter his ports, to restore wrecks, and to help vessels in distress. At the same time, Phond Sávant, the Vádi chief, made over to the British the fort of Vengurla. He bound himself to put down piracy, engaging, if he failed, to cede Nivti and Redi, to pass duty-free all articles required for the British troops, and on their paying customary duties, to allow British merchants a free passage to and from his territory. From this time, British civil and military establishments were maintained at Málvan and Vengurla. Though Kolhápúr troubles were at an end, the Sávant's quarrels kept the country in confusion for several years. Durga Báí, who soon after succeeded as regent, seized the Kolhápúr fort of Bharatgad; and as she refused to give it up, British troops had to be called in. The fort was restored. But her attacks on Kolhápúr continued till, in 1819, a British force took Sávantvádi and exacted security for good behaviour.

At the close of the struggle between the British and the Peshwa (September 1816), the transfer of the whole of the Konkan was promised to the British. Thána was handed over, but as it was the native country of the Peshwa and of almost all the chief Bráhma families, the cession of Ratnágiri was delayed. After the battle of Kirkee (1st November 1817), arrangements were made for its conquest. Suvarndurg was without difficulty taken in November 1817 by a force under Col. Kennedy. Early in 1818 he reduced Mandangad and other forts in the present Dápoli sub-division, and

shortly after Rámgaḍ, Pálgaḍ, and Rasálgaḍ in Khed. Already (January) Col. Pother advancing from the north-east had taken Páli and Bharap, and Col. Imlack from Málvan occupied Sálshi and Devgaḍ, and taking Sidgaḍ, Bhagvantgaḍ, and Áchra, secured the southern frontier. Anjanvel at the mouth of the Vášhishti, Govalkot, and other strongholds in Chiplun were taken on May 17th. In June the Ratnágiri Deshmukh's surrender of his forts, and the Dhulap's cession of Vijaydurg, completed the conquest.

Under the last Peshwa the revenue farmers, vested with both civil and criminal powers, had stopped short of no exactions, complaints were unheard, and when the district was taken, except Suvarndurg and Anjanvel, it was impoverished and almost without trade.

Since the district has been under British rule, there have been no attacks from without and no internal disturbances or breaches of the peace. In 1844-45, an outbreak in Sávantvádi slightly affected the very closely connected Málvan villages. But the disorder did not spread and was very soon put down. During the 1857 mutinies peace remained unbroken. At Kolhápur, the 27th Native Infantry Regiment broke into mutiny, and as a wing was at Ratnágiri, there was some fear that the main body of the regiment would march there from Kolhápur. A steamer sent from Bombay in the height of the stormy season put in at Mírya. A small detachment of English soldiers and blue jackets was landed, and at the same time the ladies and children were taken to Bombay. These precautions were enough and the public peace was unbroken.

Chapter VII.

History.

The British,
1818 - 1880.

CHAPTER VIII.

LAND ADMINISTRATION.1

SECTION I. — CHANGES AND STAFF.

Chapter VIII.
Land
Administration.
Changes and
Staff,
1812-1880.

Up to 1812, the British Government had no territory to administer except the fort and factory of B́ankot and the nine surrounding villages ceded by the Peshwa in 1755 and 1756. The Chiefs or Residents of B́ankot, who were also commandants of the garrison, were at first vested with very limited judicial powers. All offenders were sent for examination and trial to Bombay, and the jurisdiction of the Resident in civil matters was limited to deciding suits of not more than £10 (Rs. 100), an appeal lying to the Circuit Judge of Sálsette. When, in 1812, it came under British rule, a Resident was appointed to Málvan and the surrounding district. This officer had jurisdiction in civil suits up to £50 (Rs. 500), an appeal lying, as at B́ankot, to the Sálsette Judge. Owing to its distance from Sálsette the Málvan Resident's powers were increased in 1813. This arrangement was continued till 1819, when the Málvan Residency was abolished and the south Konkan formed into a separate collectorate with B́ankot as its head-quarters. In 1820 the headquarters were moved to Ratnágiri the most central and convenient place for the chief civil station of the district. The administration of civil justice continued as before subordinate to Thána. In 1830 the three sub-divisions north of the B́ankot creek were transferred to the north Konkan, and Ratnágiri reduced to the rank of a sub-collectorate.² Since 1830 this distribution of sub-divisions has continued, but after two years (31st December 1832) Ratnágiri was again raised to be a collectorate.³ For revenue purposes the district included five sub-divisions ; Suvarndurg, comprising the present sub-divisions of Dápoli and Khed ; Anjanvel, including the present Chiplun and Sangameshvar ; Ratnágiri ; Vijaydurg, including

¹ Besides Mr. Vidal's MS. paper on the tenures of the district (pages 203-213), Mr. Gibson's survey details (1853-1878), and Mr. Crawford's account of the final *khot* settlement, materials for the Administrative History of Ratnagiri include Mr. Pelly's Report, 1820 (Bom. Gov. Rev. Rec. 16 of 1821); Mr. Chaplin's Report, 1821 (ditto); Mr. Dunlop's Report, 1822 (Bom. Gov. Rev. Rec. 64 of 1823); Letters to and from the Court of Directors (Bom. Gov. Rev. Rec. Outward 17 of 1823, and 18 of 1824-1826; Inward 5 of 1825-1827, and 6 of 1828-1831); Mr. Dunlop's Report, 1824 (Bom. Gov. Rev. Rec. 121 of 1825); Mr. Reid's Report, August 1828 (Bom. Gov. Rev. Rec. 211 of 1828); Mr. Reid's Report (Lithog.), Dec. 1828; Lieut. Dowell's Survey Report, 1829 (Bom. Gov. Rev. Rec. 225 of 1851); Major T. B. Jervis' Stat. Account of Konkan, 1840; Capt. Wingate's Survey Report, 1851 (Bom. Gov. Sel. Old Series, II. of 1852); Annual Report, 22nd July 1856 (Bom. Gov. Rev. Rec. 20, part 4, of 1856); Bom. Gov. Sel. CXXXIV. New Series, 1873; Mr. Candy's Summary of Khoti Reports, 1873; Mr. Crawford's and the Hon. Mr. Ellis' Memoranda, 1873 and 1874, about Khots; Mr. Mandlik's Vataundir Khots, 1874; Mr. Crawford's Report to the Commissioner S. D., November 1878, about Forests; Forest Commission's Report to the Commissioner S. D., February 1879.

³ See page 856 of MS. Sel. 160 (Northern Konkan, 1818-1830).

³ Collector, 22nd March 1880.

the present Rájápur, and Devgad; and Málvan. Attached to each of these sub-divisions were one or two petty divisions, *maháls*. In 1868 the district was re-distributed and formed into eight sub-divisions and four petty divisions. The sub-divisions were Dápoli, Chiplun, Guhágar, Sangameshvar, Ratnágiri, Rájápur, Devgad, and Málvan; the petty divisions Mandangad, Khed, Lánja, and Vengurla. Subsequently (1st August 1873) the Khed petty division was made a sub-division, and Guhágar made a petty division under Chiplun. From the 1st August 1879 the petty division of Vengurla was made a separate sub-division, and at the same time the petty division of Lánja was abolished and its villages distributed among Rájápur, Sangameshvar, and Ratnágiri.

For fiscal and other administrative purposes the district is formed into nine sub-divisions. Of these the five southern are as a rule entrusted to the first assistant collector, and the four northern to the second assistant collector. The Collector generally keeps one sub-division under his personal control. The supervision of the district treasury is in the hands of an uncovenanted assistant called the head-quarter or huzur deputy collector. These officers are also assistants to the Collector as District Magistrate, and those of them who have revenue charges have, under the presidency of the Collector, the chief management of the different administrative bodies, local funds, and municipal committees, within the limits of their charges. Under the supervision of the Collector and his assistants, the revenue management of each fiscal sub-division is placed in the hands of an officer styled *mámlatdár*. These functionaries, who are also entrusted with magisterial powers, have yearly salaries varying from £120 to £240 (Rs. 1200 - 2400). Two of these fiscal sub-divisions, Dápoli and Chiplun, contain each a petty division, *peta* or *mahál*, placed under the charge of an officer styled *mahálkari* on £72 and £84 (Rs. 720 and Rs. 840) a year respectively. Like *mámlatdárs* these *mahálkaris* exercise revenue and magisterial powers within their charges.

The revenue management differs from that of the Deccan, on account of the special revenue system known as the *khoti* or village renting tenure. Under this system, besides Government, *khálsa*, and alienated, *inám*, there are three classes of villages, rented, *khoti*, peasant-held, *dhárekari*, and mixed, *khichadi*, that is part rented part peasant-held. In *khoti* villages, the *khot* is responsible for the payment of the village assessment, and according to the customary village rates, collects a grain rent from the cultivators realizing as profit all collections in excess of the Government dues. In mixed, *khichadi*, villages the land revenue is collected by the *khot* who receives a percentage of the collections from peasant-held, *dhára*, land. In peasant-held, *dhára*, villages not under the management of *khots*, and in Government, *khálsa*, villages the land revenue is collected by paid officials styled accountants, *talátis*, whose charges include one to five villages, and whose yearly salaries vary from £8 8s. to £14 8s. (Rs. 84 - 144).

Khots or *talátis* as such exercise no police functions. Each village has a separate police *pátíl*, nominated from among the more

Chapter VIII.

Land Administration.

Changes,
1812-1880.

Staff,
1880.

Village Officers.

Chapter VIII.
Land
Administration.

Staff,
1880.

Village
Officers.

influential villagers, and appointed either for life or for a fixed term. In surveyed villages the yearly pay of police *pátils* varies from 8s. to £4 8s. (Rs. 4 - 44). There are comparatively few hereditary village accountants, *kulkarnis*, and these are mostly in the southern sub-divisions. The *kulkarnis* keep the village accounts under the headmen or *gáonkars*, and are yearly paid from 8s. to £25 (Rs. 4 - 250). Under the *khots* and *talátis* are village servants called *mhárs*, available both for revenue and police duties. In the settled sub-divisions they are paid by yearly allowances, varying according to the size and importance of the village from 4s. to £2 4s. (Rs. 2 - 22).

District
Officers

There are fifteen district hereditary officers, *rāj deshmukh*, *sar desái*, *desái* or *deshmukh*, *sar deshpánde*, *deshpánde* or *nádkarni*, *karnik*, *nádganda*, *sar potdár*, *potdár*, *sar mukádam*, *mukádam*, *sar maháján*, *adhikári*, *sar náik*, and *deshkulkarni*. The origin and duties of these officers vary little from those of the corresponding officers in other parts of the Marátha country.¹

The first three, the *rāj deshmukh*, *sar desái*, and *desái* are indiscriminately termed *deshmukhs* or head officers of a sub-division, *pargana* or *taraf*. Their chief duty is to make and collect the yearly rent settlement. They hold, in relation to their charges, a place corresponding to that which the headman, *pátíl*, holds to his village. The sub-divisional headman, *nádganda*,² has similar functions. The next three, the *sar deshpánde*, *deshpánde* or *nádkarni*, and *karnik* are all called sub-divisional accountants, *deshpándes*. Their duties are those of clerks and accountants, and they bear the same relation to sub-divisional superintendents, *deshmukhs*, as village accountants do to village headmen. The *sar mukádams*, *mukádams*, *adhikáris*, and *sar náiks*, ranking below the *deshmukhs*, perform similar duties. The *deshkulkarni* has functions corresponding to those of the *deshpánde*. The *sar potlárs* and *potdárs* officiated as assayers of all coin paid into the public treasuries, while the *mahájans'* business lay in superintending the trade of the principal towns, and collecting taxes levied on particular industries. The total number of such district hereditary offices, *vatans*, is eighty-two. Their emoluments paid, except in one or two cases, exclusively in cash, are partly fixed and permanent charges, and partly percentages on the revenues of the sub-divisions, *parganás* or *tarafs*, to which their offices belong. Their aggregate emoluments, including a sum of £118 18s. (Rs. 4489) attached to the Pant Amátya as *sar desái* of Bánda, amounted, before any settlements were made, to £2739 4s. (Rs. 27,392), or an average of £33 8s. (Rs. 331) for each office. These offices are so minutely sub-divided that the aggregate emoluments of the actual holders of the eighty-two offices were, in 1864, stated, by the president of the *vatan* commission, to be less than

¹ For details see Grant Duff's History of the Maráthas. Nairne's Revenue Hand Book (1872), 351 - 352; Molesworth's Dictionary; and Wilson's Glossary of Indian Revenue Terms.

² This is Kánarese, *nádu* a village and *ganda* a headman.

those of one corresponding office in the Southern Marátha country.¹ The Ratnágiri district officers were at that time (1864) a poor depressed class, men of quite a different stamp from the large, powerful landholders of the Southern Marátha districts. Still, though under the Maráthás some of their power was lost by the employment of stipendiary officers, they have always possessed considerable local influence. Under the British the service of hereditary district officers was continued. The average contribution for service was found by the *vatan* commission (1864) to be about 34·375 per cent (5½ annas in the rupee) of emoluments. A non-service settlement, by which, in consideration of release from duty, the holders should give up 34·375 per cent (5½ annas in the rupee) of their pay, was subsequently offered. Of the eighty-two officers only thirty-five, with yearly emoluments of £138 6s. (Rs. 1383), have hitherto accepted the non-service settlement. The rest continue, either in person or by deputy, to perform such clerical work as is assigned to them by the stipendiary officers, *mámlatlúrs* and *mahálkaris*, of the sub-divisions and petty divisions to which they are attached.

There are no hereditary village headmen, *pátils*, their place being in a great measure supplied by the village renters, *khots*. In 329 villages out of 1337 there are hereditary village accountants, *kulkarnis*, whose pay, except in a few isolated instances, consists entirely of cash allowances. Of the 1337 villages, 607 or nearly one-half are rented, *khoti*², 210 are peasant-held, *dhárekari* or *kulúrgi*, and 397 are mixed, *khichadi*, that is part rented part peasant-held. The rest are either granted, *inám*,³ or managed by Government, *khálsa*.

SECTION II.—TENURES.

The special institution of village renters, *khots*, has made the Ratnágiri tenures most complicated and difficult. In villages managed by hereditary farmers, or renters, several classes of tenants have been developed with rights and interests varying from the free peasant holder, *dhárekari*, who is charged no more than the state demand, to the yearly tenant or shifting labourer, *upri*, from whom competition rates are levied. There are at present four such grades of tenants. Peasant holders, *dhárekaris*, the representatives of the members of the village community under the original peasant-holding, *kulúrgi*, system; reduced peasant holders, known as *dupathkaris*, *dilpathkaris*, and *daspathkaris*, probably most of them representatives of such of the original holders as the *khots* forced to pay something more than the state demand; lower than these the very large class of occupancy tenants, some perhaps the representatives of reduced peasant holders, others to whom, to tempt them to settle in his village, the *khots* had offered favourable terms, or who from long residence had gained a prescriptive occupancy right. The lowest class, that of shifting labourers or yearly tenants, is small.

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Staff,
1880.
District
Officers.

Village
Hereditary
Officers.

Tenures.

¹ Mr. S. St. J. Gordon to the Chief Secretary to Government, 100, 31st December 1864. The meaning of the original is not quite clear.

² These are also known as purely rented, *nival khoti*.

³ Among the granted, *inám*, villages many are rented, *khoti*, the renters holding the same position to the grantees as their brethren in other villages do to Government. Mr. G. W. Vidal, C. S.

Chapter VIII.
Land
Administration.

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The *khot's* recognized position is that of a superior holder under the Survey Act. Subject to the provisions of that Act he has full rights in all lands unencumbered by tenant rights, and has the reversion of all lapsed tenant lands. His rights have lately been very fully defined in the Khot Act (I. of 1880). He may hold and give out for tillage all waste, assessed or unassessed, and make from it whatever profit, over and above the Government assessment, local custom or special agreement allows. He may also till or sublet all land either temporarily or permanently abandoned by its holders, *dhórekaris*. Until a right of re-entry is asserted and established, such land becomes unoccupied, *gayál*, and the *khot*, assuming its management, disposes of it as he thinks best. The *khot's* right to till the village waste does not extend to certain unassessed lands requiring labour and capital to bring them under cultivation, Government having always reserved the right of granting improvement leases, *kauls*, for reclaiming tidal swamps, *khájan*, and dunes or sand hills, *pulanvat*. No such leases have ever been granted by *khots*, though *khots*, as well as their tenants, appear as lessees.¹

Under the old or customary, *mámul*, system still prevailing in the unsurvey-settled parts of the district, the lump payment, *jama*, due by the *khot* consists of the aggregate of the assessment, *dast*, imposed on all the village fields. The *khot's* payment is a grain rental, part commuted into cash at rates, *baha nakt*, fixed at the last field survey, *páhuni*, and consequently very much below current prices, and part at rates yearly fixed by the Collector before the 31st March at a fraction below the ruling market prices.² These annually fluctuating rates also govern the commutation of grain rentals into cash payments where assistance is sought by the *khots* in the recovery of their dues from their tenants. The Collector thus fixes rates for the staple grains of the district, rice, *nágli*, *vani*, and *harik*. The share of these grains, usually one-half, commutable at current rates, is called the original crop revenue, *ain jinnas rasuli*. The rest is commutable at the old fixed rates, *baha nakt*.³ Payments to hereditary officers, *hukólars*, and village servants are similarly commuted.

The *khot's* profit is the difference between the Government assessment and the amount which custom or agreement allows him to realise from the cultivators, together with the produce of all land in his private occupation. This profit, judging from the prices realised by sales of *khoti* estates, may be estimated in pure *khoti* villages at from fifty to seventy-five per cent on the Government demand. Soon after the opening of each revenue year (August 1st) the *khot*, or if there be more than one co-sharer and they have agreed

¹ Government have recently (Gov. Res. 2476, 26th April 1876) conceded to the *khot* the refusal of improvement leases. Under these orders if any one else asks for a reclamation lease, the *khot* is first offered it, and if he declines it is given to the original applicant.

² The Collector fixes the rate a fraction below market prices because he has to take into consideration the cost of carriage of grain to the nearest market or port.

³ The revised settlement now being introduced will render this cumbersome system unnecessary. The land revenue will then be constant, not changing with the price of grain.

to a system of rotation, the managing *khot* for the year has hitherto been required to execute an agreement, *kabulāyat*, undertaking to pay the total demand on the village for the year and to furnish adequate security for the fulfilment of his contract. This custom appears to date from the beginning (1818) of British rule.¹ At first the agreements were simple with very few clauses. Afterwards, as occasion required, additional sections were introduced.²

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If a *khot* is prevented by family disputes from signing, or if he declines to sign the agreement, *kabulāyat*, or if he becomes a defaulter, the management of his village has hitherto been assumed by Government, and though as an act of grace they were generally refunded him, the *khot* was not regarded as having a legal claim to any profits accruing during such management. At the same time he has hitherto been bound to make good any losses incurred by Government before the village was restored. The Government official, called the attachment clerk, *japtidār*, who is appointed to collect the revenue, performs all the duties of a village accountant. In pure peasant-held, *dhārekari*, villages the *khots* of which are usually Marāthās, a certain varying allowance, *mushāhira*, is paid to the *khot* on account of the collections made by him from the peasant holders, *dhārekaris*. In survey-settled villages a fixed scale or percentage on the collections is substituted for this allowance. The *khots* usually have a large share of the best land as their private holdings. In respect of such land they may, according to circumstances, be holders, *dhārekaris*, by inheritance or purchase, or they may be tenants. In many mixed, *khichadi*, villages the whole of the holding, *dhūra*, land is in the hands of

¹ Bom. Gov. Sel., New Series, CXXXIV. 79.

² The following (Bom. Gov. Sel. CXXXIV. 81,82) is an abridgment of the form in use before the introduction of the revenue survey: "To the Collector of Ratnāgiri. Agreement of *khot* of I have agreed to the management of the whole *khoti* of the said village for the current year. I.—According to the annual custom I have agreed to the full payment, *jamabandi*, in cash and grain, I will pay the eight instalments", (in survey-settled sub-divisions the *khots'* assessment is payable in four instalments, 15th December, 1st February, 15th March, and 1st May), "each before the twentieth day of each month between November and June. Then follow details as to the grain assessment and its valuation. II.—If the assessment is, by leases or by any Government order, more under each head, *isam*, than that of last year, I will pay the full assessment according to the first clause. III.—Items not entered in the accounts I will duly pay and allow no complaint to arise. IV.—I will manage the village as in past years without extortion, and will give no cause for complaint; should any arise, I will pay any fine up to £10 (Rs. 100) that Government may order. V.—Without making any demur on account of injury by fire or flood, I will pay all the assessment as laid down in clause I. VI.—Should any tenants die, leave the village, or become too poor to till their lands, I will, without any complaint, pay the whole assessment, and keep the lands fit for cultivation. VII.—Relates to payments to alenees, *inimdiars*. VIII.—The agreement is in my name, but should any of my agents commit fraud as regards receipts, I will be responsible. IX.—I will duly enter in the cultivators' receipt books the rents received from them. In default I will pay such fine up to £10 (Rs. 100) as Government may order. X.—I will manage the village according to such orders as have been or may be given and will take and give copies to the next manager. XI.—This and additional sections relate to the joint responsibility of co-sharers. XII.—Whenever Government may summon me I will attend and will give no excuse. Should I fail to attend when summoned I will pay a fine up to £5 (Rs. 50). XIII.—Relates to village expenses, *gram khorch*. XIV.—Relates to trees."

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the *khot* coparcenary, all the other cultivators being their tenants or half-crop payers, *ardhelis*. The land in the occupancy of a *khot* is called private, *khot khísgi*, in distinction to the common, *khot nisbat*, lands in the occupation of tenants. A *khoti* sharer cultivating *khoti* land, the profits from which are the common property of the *khot* coparcenary, is strictly liable to pay the customary rent thereon, as if he were an ordinary tenant. But this is a matter of private arrangement among the sharers, and where the land is equally divided, it is not usual for the sharers to pay the managing *khot* more than the Government assessment, *dast*. The division of profits according to shares is made at the close of the revenue year (July 31st). In some cases the sharers execute a partition deed, *dhada vintap*, by which the whole *khoti* land in the village, whether in the occupancy of the sharers or of their tenants, is apportioned among the coparcenary. Each sharer manages his own share and collects his rents from his tenants. In such a case, should a tenant throw up his land it reverts, not to the joint estate, but to the individual sharer in whose lot the land lies.

In addition to many privileges incidental to their position as heads of villages where there are no hereditary officers to take precedence of them, the *khots* formerly enjoyed the right of exacting from all their tenants except peasant holders, *dhárekari*s, one day's labour in eight, *áth veth*; of forcing the peasant to plough for them, *níngar veth*; and of pressing them to carry their palanquins. While thus working for the *khot* the tenant was given a subsistence allowance of grain. These labour cesses have been stopped.¹

Peasant Holders.

The holding, *dhára*, similar to the Deccan *mirási* tenure is the highest form of tenant right. The tenant holder, *dhárekari*, is assessed at a fixed rental based on the area and the character of the land actually under tillage at the time of the last survey. So long as he pays this assessment he cannot be ousted, and the *khot* cannot, without his consent, exact any further payment. He has moreover the right to inherit, sell, mortgage, or dispose of his estate in any way he pleases. He has also, subject to making good to the *khot* any loss his absence may have caused him, an unlimited right of re-entry, and is not held to have given up his land unless he has passed a formal and duly recorded deed of abandonment, *bedára patra*. If a returning tenant holder fails to meet the *khot's* claim for damages, he is compelled to accept an inferior tenure, the *khot* reimbursing himself by exacting either additional payments or the customary share of the produce levied from tenants of *khoti* land. Should the tenant holder, *dhárekari*, leave his land unencumbered by mortgages he will thus, in very few instances, be able to regain his former position. Should he leave a mortgagee in possession, who for his own interest will take

¹ In defence of the eighth day labour tax, *áth veth*, it is fair to state that by means of this labour a very large area of valuable rice land has been made and many salt marshes and swamps reclaimed. Mr. G. W. Vidal, C. S.

care that the value of his security is not lessened, the returning holder will, on redeeming the mortgage, revert to his original position.

A holding, *dhúra*, may be of any size, from a single plot of land or even a single tree, to the entire arable land of a village. It consists of all the lands registered in the name of each individual or family at the last survey. These holdings are by mortgage, sale, and inheritance, subject to constant sub-division. The assessment, *dast*, on this class of holding remains unchanged from one settlement to another. It is a grain payment, which, as in the case of the revenue paid by the *khot* to Government, is divided into two portions, one commutable into cash at the rates fixed yearly at the former survey, the other at the rates fixed yearly by the Collector on the basis of the ruling market prices. In Dápoli and Khed one-fourth of the assessment, *dast*, is levied on the old fixed rates, *baha nakht*, and three-fourths are paid as original crop share, *ain jinnas*, at the current rates. In the remaining sub-divisions one-half is levied at the old rates, *baha nakht*, and one-half instead of the original crop share, *ain jinnas*. If a tenant holder or a *khot* demurs to the rates fixed by the Collector, he has the option of bringing this portion of his produce to the local revenue office, *kacheri*, or to some regularly appointed grain store, *phad*. The grain is then sold by auction, and the proceeds credited as the sum due. In practice this almost never happens. Several extra demands, varying in different places, are, under the name of cesses, *pattis* and *bábs*, included in the assessment, *dast*, levied from the tenant holders, *dhúrekari's*. The entry of these charges in a peasant's account is proof that his land comes under the holding, *dhúra*, tenure. Some of these cesses, such as the stable cess, *gale patti*, and the superintendent's cess, *sar desh mukhi*, are commuted at fixed rates. Others, such as allowances to hereditary officers, *hakdárs*,¹ and payments to village servants, *gáon khureh*, are commuted at the current market rates. The amount of these dues is included in the village rental, *jamábandi*, and is recovered rateably from tenant holders, *dhúrekari's*, in the proportion that their individual assessment bears to the entire village rental, *jamu*. The rest, in mixed, *khichadi*, villages is paid by the *khot*, who recovers the amount from his tenants according to his own estimate of their fair share in the expense. The extract given at the foot of next page from the debit side of a tenant holder's, *dhúrekari's*, receipt book, illustrates the form in which the assessment appears in the accounts. The amount is divided into two main items, one due to Government the other due to certain officers. The amount due to Government is brought under two main heads, the first head including all the sums paid in cash and the second head showing the estimated value of the grain received under the different cesses and allowances. No charges are included

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¹ Under *hakdárs* come hereditary sub-divisional officers, *desh mukhs* and *deshpáindes*, and village accountants, *kulkarnis*.

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for village expenses, *gáon kharch*, as none of the village menials were paid by the state.¹

Peasant holders, *dhárekaris*, often sub-let their fields at a profit to other cultivators, who hold much the same position as tenants of *khoti* land. In villages under *khot* management, the holders, *dhárekaris*, are required to make yearly agreements, *kabuláyats*, for the payment of their dues, and to give security to the *khot* in the same way as the *khot* engages with Government for the revenue of the whole village. In villages directly under Government management, *khálsa*, and in attached *khot* villages, the holders, *dhárekaris*, pass the same agreements to the state. Finally, this much-coveted tenure carries with it certain timber and other rights and privileges denied to inferior holders.

¹ Extract from the Receipt Book of Vámanji Bápuji of Harnai :

AMOUNT.	ITEM.
Rs. a. p.	
0 0 0	Balance.
11 14 10	Amount due as fixed at the settlement for the current year 1852-53.
11 8 4	Government.
	Rs. 4-5-9 Cash :— Extra cesses, <i>patti bábtí</i> , Rs. 2-1-6. Details are : Stable cess, <i>gale patti</i> , 12 <i>mans</i> grain at Rs. 2-14-½ the <i>khandi</i> , Rs. 1-11-8 ; Superintendent's cess, <i>sar desh mukhi</i> , 4 <i>páylis</i> and 2½ <i>shers</i> at Rs. 14-6-2½ the <i>khandi</i> , calculated on 12 <i>mans</i> at ½ <i>man</i> the <i>khandi</i> , Re. 0-3-6 ; Commutation cess, <i>tasar</i> , clarified butter ½ <i>sher</i> and 7 <i>tolas</i> , on 12 <i>mans</i> , at one <i>sher</i> the <i>khandi</i> , price Rs. 0-1-11 at Rs. 7-10-9½ the <i>man</i> , deduct for labour 9 <i>pies</i> at Rs. 2-14-½ the <i>man</i> , remainder Re. 0-1-2 ; Assayer's cess, <i>potdari</i> , on Rs. 4-9-11, at Rs. 1 ⁹ / ₁₆ per Rs. 100, Re. 0-1-2 ; total Rs. 2-1-6. Fixed commutation rates, <i>baha nakt</i> , rice 3 <i>mans</i> at 5 <i>mans</i> the <i>khandi</i> worth Rs. 2-8-10 at Rs. 17 the <i>khandi</i> , deduct for labour 9 <i>paylis</i> and ¾ <i>sher</i> at one <i>man</i> the <i>khandi</i> , value 4 <i>as.</i> 7 <i>p.</i> at Rs. 9-9-5½ the <i>khandi</i> ; remainder Rs. 2-4-3. Total Rs. 4-5-9.
	Rs. 7-2-7 Grain :— Rice, 10 <i>mans</i> 9 <i>páylis</i> and 1½ <i>shers</i> at Rs. 13-8 the <i>khandi</i> at Harnai market rates. Details are : 9 <i>mans</i> for collection after deducting 3 <i>mans</i> for fixed rates, <i>baha nakt</i> , from the original rental, <i>ain jamabandi</i> , of 12 <i>mans</i> ; ¼ <i>man</i> measuring cess, <i>mitpeartala</i> , of four <i>shers</i> a <i>man</i> ; 9 <i>páylis</i> ¾ <i>sher</i> purchase cess at one <i>man</i> the <i>khandi</i> ; 4 <i>páylis</i> ½ <i>sher</i> carriage loss, <i>tut</i> , on 10 <i>mans</i> 5 <i>páylis</i> and ¾ <i>sher</i> at ½ a <i>man</i> the <i>khandi</i> .
0 6 6	Sub-divisional officers, <i>jamádars</i> :— Superintendent's cess, <i>desh mukhi</i> , rice 4 <i>páylis</i> 2½ <i>shers</i> at 8 <i>páylis</i> the <i>khandi</i> , at the rate of Rs. 13-8 the <i>khandi</i> , Re. 0-3-3 ; Accountant's, <i>deshpindé's</i> , cess, Re. 0-3-3.
12 3 5	As by last year's settlement.
0 4 7	Deduct on account of decrease in rates of grain at market value. Government Re. 0-4-3 ; sub-divisional officers, <i>jamádars</i> , Re. 0-0-4.
11 14 10	Remainder.

(Signed) RAMCHANDRA MAHÁDEV KULKARNI.

26th October 1853.

In old Suvarndurg, comprising the present Dápoli and Khed, many resident holders, *dhárekaris*, at various times before British rule, agreed, on the *khots'* undertaking to meet all Government demands, to pay them from one and a half times to double the quantity of grain at which their fields were rated. When these agreements were made, it is probable that while they obtained a more convenient form of payment, the holders, *dhárekaris*, owing to the low price of grain, lost little by the change. Had this arrangement not been made they would, in years of low prices, have found it hard to raise cash to pay the assessment. The *khots* would have taken the grain at their own price, often ruinous to the cultivator, and the holders, *dhárekaris*, would, as their only choice, have had to carry their produce to the nearest Government office or grain store, *phul*. The rise in the price of agricultural produce during the last half century has made these terms, at first reasonable enough to both parties, unduly favourable to the *khots*, who have enforced them under very altered conditions. Like pure holders, *dhárekaris*, these reduced holders cannot be ousted so long as they pay the assessment, and the *khots* cannot raise their rents. They have also the privilege, which other *khoti* tenants do not possess, of disposing of their lands by sale and mortgage. The chief reduced holders are the one and a half payers, *jilhicúls*, who give the *khot* one and a half *mans* of grain for every *man* of assessment, the one and three quarters payers, *párnedonpatkaris*, giving one and three quarter *mans* for each *man* of assessment, and the double payers, *dupatkaris*, giving two *mans* for each *man* of assessment.

Besides these there is in Dápoli another class of reduced holders called *daspatkaris*. Their origin is different from, and their position higher, than that of other reduced holders. Like pure holders, *dhárekaris*, they pay the Government assessment, *dast*, but in addition give the *khots* a fixed cash bonus of eight annas on every *man* of assessment. They are called *daspatkaris*, literally ten times payers, because they pay ten rupees for each *khandi* of assessment.

The *khot's* lower tenants, the majority of the cultivators, may be divided into two classes. These are tenants with occupancy rights who, so long as they pay the customary or stipulated rent and such extra cesses as village usage allows, are not liable to ejectment by the *khot*; and yearly tenants cultivating on whatever terms they may make with the *khot*. Under the first class come all resident cultivators of older standing than the *khot*. These are called hereditary cultivators, *ratundár kardás*, and are generally supposed to be descended from old families of holders, *dhárekaris*, who, too weak to resist the *khot's* encroachments, have parted with their ancient rights. Such tenants are for the most part Kunbis or Maráthás. In some villages the Mhárs belong to this class. But as a rule partly by reason of their useful services, and partly from the extreme difficulty of recovering more rent than they chose to pay, the Mhárs have succeeded in keeping their ancestral holdings better than members of the higher castes. Shepherds, *dhungars*, are never, and potters, *kumbhárs*, and Muhammadans

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are rarely hereditary tenants, *ratandárs*. Besides the original hereditary tenants, other cultivators have acquired more or less definite occupancy rights. Originally shifting labourers, *upris*, induced by the *khots* to settle and cultivate deserted, *gayál*, fields, they have, by the *khots*' grant and by the lapse of time, gained as good a position as the older hereditary, *ratandár*, tenants. Custom does not allow the *khot* to dispossess them. For long no precise term of years was fixed as giving a tenant a claim to occupancy rights. But in the Khot Act I. of 1880, passed by the Bombay Legislative Council it has been laid down that all tenants who have continuously held land since the beginning of 1845 have an occupancy right. Under this rule it is found that at least ninety per cent of the *khots*' tenants are possessed of occupancy rights. In some villages it has been the custom for the *khot* to keep all relinquished lands in his own management, and to give them out for cultivation to fresh tenants every year, or after each period of crop rotation. In such villages none but old hereditary, *ratandár*, tenants have gained permanent occupancy rights. Where these rights exist, they are, as a rule, transferable by inheritance only, and not by sale or mortgage, and are liable to forfeiture, should the tenant, even for a time, leave the village without making arrangements for the cultivation of the land and the payment of the rent. Custom varies considerably in different villages. Lieutenant Dowell, in his report on the survey of the Ratnágiri sub-division (November 1829), mentions several instances in which occupancy rights in *khoti* land were mortgaged and sold both with and without the *khot's* consent. These cases are exceptional. The *khots* themselves have, indeed, often sold portions of their *khoti* land to cultivators, the purchasers virtually becoming holders, *dhárekaris*, the *khot* parting with his right to demand anything over and above the Government assessment. Grants of *khoti* lands are also occasionally made by *khots* to Bráhmán beggars and village priests, *upádhyás*, either wholly rent-free or on payment of the Government dues. Such gifts, though unsupported by deeds, are always religiously respected by the grantor's descendants.

Khoti land in the occupation of yearly tenants, if undivided among the *khot* coparcenary, is entered in the village books in the name of the *khot* coparcenary, and is called joint *khot* property, *khot nisbat samáik*. The tenants of such lands are usually styled waste tillers, *bádhkaris*, as distinguished from hereditary, *ratandár*, tenants. *Bádhkaris* may or may not be residents of the village in which they cultivate as yearly tenants. In many cases they hold hereditary land in one village, and at the same time from year to year undertake the cultivation of waste land in another village, continuing to live in their old homes. This often happens on the boundaries of two villages, because, for convenience in watching and other field work, husbandmen like to have all their cultivation in one place. In other cases they leave their old homes and settle in the new village. In either case they are called waste tillers, *bádhkaris*, though many of them have through lapse of time and other causes gained occupancy rights.¹

¹ Khot Commission to Government 186 of 1875 February 5.

A resident of one village who cultivates in another is also called an outsider, *dulandi*. Yearly tenants are liable to ejectment at the will of the superior holder, and in the absence of any special agreement, are also liable to have their rent raised from time to time. Ordinarily there is little difference in the rent exacted from the *khot's* tenants whether permanent or temporary. The yearly tenants having no ties to bind them to the land and being free to throw it up whenever it suits them, are usually able to obtain from the *khot* terms as little unfavourable as those allowed to occupancy tenants.

The rent paid by a *khot's* tenant consists either of a definite proportion of the actual harvest determined by a crop inspection, or of a grain or cash payment fixed on the basis of the average yield of the land without reference to the actual produce of the year. The first and most common mode of payment is called settlement, *thal*, and the crop inspection is called appraisement, *abhāraṇi*. The following description of the system written by Lieutenant Dowell in 1829 still holds good.¹ The cultivators under the *khot*, both occupancy tenants, *kardās*, and yearly tenants, *bādhakarīs*,² are called half-crop, *ardheli*, payers, third-crop, *tirdheli*, payers, or fourth-crop, *chantheli*, payers. The share of the gross produce to be paid by them is fixed yearly in every field by agreement between the *khot* and the cultivator. A few days before the harvest, they go round together and settle the amount by estimating the quantity of grain in each field, both parties trying to get the best of the bargain. In rice lands the *khot's* share is estimated at one-half or even a little more, in middling uplands at one-third, and in poor uplands at one-fourth. The fees due to the village Mhār and temple servant, *gurar*, are paid by the cultivator. The occupancy tenant, *karda*, also pays a small amount for the yearly field sacrifices. When, as often happens, the *khot* and his tenant, *karda*, cannot agree as to the produce of a field, they appoint umpires, *tichārit*, of the chief villagers, and as all are present the payment is settled at once. The tenant's only check against false entries by the *khot* is his own recollection of the agreement made in each field. In cases of poverty or loss, the *khot* remits a little of the revenue, but not more than 150 to 200 pounds of grain (4-5 *manas*) in the whole village. In bad seasons the loss falls on the *khot* as the tenants pay only for the grain that thrives. On the other hand, when the Government grant remissions, the *khot* is the only gainer. The usual proportion of the crop taken by the *khots* is one-half in rice and garden land, and one-third in uplands. These rates are seldom exceeded. If the *khot* determines to levy more, he realises the increase under cover of cesses and imposts. Besides to the half-crop payer, the term *ardheli* is applied to the whole body of settlement, *thal*, paying tenants, whether permanent or temporary. The other mode of payment by settling for the field itself without reference to the harvest is called

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¹ Lieutenant Dowell. 1st November 1829. Though written only of the Ratnāgiri sub-division, Mr. Dowell's account is fairly applicable to the whole district.

² It has been already noticed that some *bādhakarīs* have occupancy rights.

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contract, *mukta* in the north and *khand* in the south. The contract system is always preferred by the cultivators. They avoid the yearly haggle with the *khot*, and in other respects it is usually more favourable to them. In a very few villages, the tenants hold written agreements from the *khots*, engaging never to levy more than the amount stipulated as the yearly rent. Such permanent contracts, *muktás*, are very uncommon, and these rents are liable, as a rule, to periodic, if not to yearly, revision. The tenant who undertakes to till the land passes an agreement, *mukta chithi*, to the *khot* to pay a certain rent from year to year. These documents are carefully kept by the *khot* as evidence against the tenant, should he at any future settlement claim the land as his holding, *dhára*. Holders also occasionally till *khoti* land as tenants of the *khot*, and where a contract, *mukta*, has been made, the terms and all particulars are duly entered in the yearly agreement executed by the holder, *dhárekari*. A considerable proportion of the district rice lands are thus held on payment of grain contracts, *muktás*. Coast Muhammadans and other seafaring and fishing classes rent land in this way for hemp cultivation, to supply the materials for ropes and nets. Bráhman cultivators too usually induce the *khot* to substitute the contract, *mukta* or *khand*, for the settlement, *thal*, rent. Similarly small plots and gardens within the village homestead are usually let on contracts, *muktás*, to the residents in *khoti* villages. In these cases the rent is usually paid in a lump cash sum covering all demands, *ukta tharár*. In coast villages, where *khoti* land has, by Bhandáris, with much expense and labour, been made into cocoanut gardens, the Bhandáris usually pay a fixed cash rent when the trees are tapped; when the trees are kept for fruit, the tenants sometimes pay a fixed cash rent and sometimes a share of the produce. Owners who sub-let cocoanut gardens usually exact four-fifths of the produce from the tenant when the trees are kept for fruit only, and from 2s. to 6s. (Re. 1-3) a tree when they are tapped. Neither settlement, *thal*, nor contract, *mukta*, rents are payable during the periodic fallows, which, for want of manure, nearly all uplands require. In any one year generally not more than one-fourth of the upland area is under tillage. But the tenants are bound not to let any land in their occupation lie fallow without due cause. Those who till rice land have usually assigned to them a certain share of brushwood-bearing upland. In this land the trees are yearly stripped of their leaves, twigs, and branches to be burned on the rice fields as ash manure, *abá*. This is usually the only privilege a tenant has over the timber growing on his land.

The *khot's* claim to a share of the crop is not limited to grain. It extends to all produce alike. Thus in the north for every *man* of gram from twenty to twenty-five bundles of straw are demanded. A share of the produce of all fruit trees growing in *khoti* land, even though planted by the tenant, is also exacted. Jack fruit is everywhere an appreciable item in the *khot's* revenue. The usual mode of assessing fruit produce is for the *khot* to go round and count or estimate the fruit and to receive in cash the value of his

share, one-third or one-half as the case may be, and to take in addition two or three of the best for his own use.

In addition to the customary produce rents, the *khots*, according to circumstances, levy from the tenants certain extra cesses. The custom of different villages varies greatly and the collection of these extra demands depends almost entirely on the personal power and influence of the *khot*. Cesses were formerly most numerous and oppressive in Dápoli, Chiplún, and Khed, where most of the *khots* belong to the strong Chitpávan sub-division of Bráhmans. The eighth day, *áth reth*, and other labour cesses, have already been alluded to. Under the head of *khot* exactions, *kírsai*, the *khots* used to make irregular demands on the tenants for payments on account of produce other than grain such as grass and firewood. This practice was put a stop to by Government under Act XX. of 1839. Another almost universal demand is the measure cess, *nápvartála*, consisting of the levy from the tenant of $\frac{1}{16}$ th to $\frac{1}{8}$ th (one *sher* to two *páyis* the *man*) in addition to the regular rental. On the tenant's bringing his grain to the *khot's* house to be measured, the *khot's* servant, who measures it, is also entitled to a double handful, *phaski*. Lastly, the tenant has to pay a cash contribution towards the general village expenses, *gáon khurch*. A fixed sum for the remuneration of village menial servants is levied by Government from the *khot* and the holders, *dhúrekarris*. The portion paid by the *khot* is recovered by him from his tenants rateably, and usually a further sum is exacted under the same head for other miscellaneous village charges such as maintenance of paupers, religious services, and similar objects common to the community.

SECTION III. — HISTORY.

The earliest recorded land revenue settlement of Ratnágiri was, in 1502, by Yusuf Ádil Sháh of Bijápur.¹ At that time, though the district had passed through many years of trouble for long remembered as the rule of the spear, *bhúlkoti*, traces remained of the revenue system of the Vijayanagar kings.² Such of the old revenue officers as rendered their allegiance, were continued in their posts, and chiefly in central Ratnágiri, under the name of farmers, *khots*, a new class of officers was introduced partly as revenue farmers partly to carry out the duties of village headmen.³ Under this settlement rice lands were taxed at one-sixth of the gross produce payable part in money but most in kind;⁴

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Bijápur
Settlement,
1502.

¹ Jervis (Konkan, 89) makes the Bahmani settlement of 1429 extend to the Konkan. But the Bahmanis had not then conquered, hardly even entered the province. If the settlement was introduced in any part of the Konkan, it must have been in the uplands, *chhatmatha*, above the Sahyadris. See Grant Duff, 26.

² Mr. Dunlop, 15th Aug. 1824; Rev. Rec. 121 of 1825, 2, 3. ³ Jervis' Konkan, 75, 76.

⁴ Jervis' Konkan, 82, 83. Mr. Dunlop says, (Rev. Rec. 121 of 1825, 67) under Bijapur there was no established measure of land, and the government share, one-sixth of the produce both of grain and of fruit trees, was fixed by appraisement and from year to year varied with the harvest. With a fairly strong government, a rich local and foreign trade, and so moderate a government demand, the country greatly improved.

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Bijapur
Settlement,
1602.

Shivaji's
Settlement,
1670-1680.

and hill lands, *varkas* or *bhavad*, were taxed by the 'plough,' *nangar*. In the case of waste lands and waste villages the officers would seem to have been allowed to make their own terms with any new tenants they might find, and as they were then greatly in demand, tenants obtained very favourable terms. All members of former village communities were treated as peasant holders, *minasdars* or *dhurukars*, and assessed at a light rent payable chiefly in kind. Vexatious practices and extra cesses were forbidden. Except trade dues and house charges for revenue officers there were no miscellaneous, *shigar*, cesses. The revenue was gathered by village accountants and brought by subordinate agents to the government treasuries.¹

The next change in the revenue system was introduced by Shivaji about a century and a half later (1670-1680). At first by Dadaji Konddev, and afterwards by Amaji Dattu, a settlement was made on the same principle as the settlement introduced early in the seventeenth² century into parts of the Deccan and of the central Konkan, by Malik Ambar the Ahmednagar minister. The chief change in the new system was the measurement of rice land by a rod of five cubits and five fists, that is five and five-sixths cubits or 114.035 English inches.³ Shivaji's settlement included three parts, the treatment of rice, of hill, and of garden land. It is believed that all the rice lands were measured into *highs*, each of 1014 square yards, divided into twelve classes,⁴ and from experiments made during three successive years,⁵ the government demand, estimated at about forty per cent of the produce, was fixed⁶ at from 57½ bushels an acre in the best to 23 bushels in the poorest land.

¹ Jervis' Konkan, 82, 83.

² Malik Ambar's settlement stretched, except the Hubshi's lands, from Bassem to Binkot. Jervis' Konkan, 68.

³ Todar Mal's or Akbar's *hath* (1590) was a square of 60 *Hathas*, or yards, the same as used by Naushirvan 5500 in Persia, measured by a chain instead of the old elastic Hindu rope. The three chief Hindu land measures were the Mesalman *baghi* of 5119.7 square yards, the Marathi *baghi* of 4013.87, and the Central *baghi* of 2048.77. Jervis' Konkan, 69.

⁴ The classes were: 1, First *adal*; 2, Second, *cham* or *degram*; 3, Third *son*; 4, Fourth, *charam* or *charam*; 5, Bushland, *penpal*; 6, Salt, *kharot*; 7, Rocky, *barral*; 8, Stony, *khamb*; 9, Pulse, *kharot* or *harot*; 10, Hemp, *harot*; 11, Rice-land, *cham* or *cham*; 12, Tree root, *matul*. Jervis' Konkan, 94, 95.

⁵ The subdivisions from which villages are said to have been chosen were, in Kolaba, Avhirgad, Rapur and Raygad, and in Ratnagiri, Savandurg, Anjanvel, Ratnagiri and Vijaydurg. In measuring rice land a deduction, a *Ped* or *pedharastabad* or *tyared* of three *panas* in every *tohar*, was made. In hill or lands, *varkas*, a *pana* or a third of the uplands a third was deducted. The deduction was also called *tyar*. (Mr. J. R. Gibson). The produce raised in second crops on rice land was assessed as follows: turmeric, *harot*, of 5 *manas* the *baghi*, after deducting a third of the actual area cultivated; hemp, *har*, 5 *manas* the *baghi*, one-fourth being deducted from the area cultivated; sugarcane, 3½ to 6½ *manas* of raw sugar the *baghi*; summer rice, *charam*, 2½ *manas* of grain the *baghi*.

⁶ The details in bushels the acre are: First quality 57½ (12½ *man* the *baghi*), second 45 (10 *man*); third 36½ (8 *man*); fourth 28½ (6½ *man*); bushlands 36½ (8 *man*); salt 34½ (7½ *man*); rocky, stony, and pulse land 28½ (6½ *man*); *cham*, hemp, and uncultivated root land 23½ *man*. (Jervis' Konkan, 94, 95). Since Shivaji's time, from the pressure of population, two new classes of hill-top, *shirad*, land have been added. The better of these have been assessed at 17½ and the poorer at 8½ bushels an acre. Jervis' Konkan, 96.

Except in a few cases, where they were measured and according to the years of fallow required three, five, six or seven acres were counted as one, hill lands, *carakas* or *dongar*, were assessed by the plough, *nángar*. Large allowances were made for rocky or unproductive spots.¹ In garden lands, the system in former use of levying a total or absolute amount, *kanoil*, at about one-sixth of the estimated crop was changed into an equal division of the whole produce.² All other cesses were stopped, and *pátils*, *khotis*, *kulkarnis*, *deshmukhs*, and *deshpándes* were forbidden interfering beyond their strict duties and powers.

Shiváji's demand of forty per cent or two-fifths of the produce would seem to have been more than the cultivators could pay. It was either openly allowed or secretly arranged, that the *highéis* on which the above mentioned rates were charged should be of 4616 instead of 4014 square yards. By this means the government share was reduced to about one-third.³

In 1683, Annáji Dattu's system was upset by Kalush, a friend of Sambhájí. The land revenue was farmed and taxes levied that raised the whole demand to between one-half and two-thirds of the gross produce. Unable to pay, the people went out as robbers and marauders. After Sambhájí's death (1689) in the south the regent Rájárám did what he could to improve matters. But Suvarndurg and Anjauvelin the north had passed out of the hands of the Maráthás into those of the Habshi.⁴

The chief change made by the Sidi was commuting, *tasar*, part of the regular demand from produce into money.⁵ The proportion was three-twentieths of the whole (3 *manas* a *khandi*).⁶ Other changes were, a new bullock tax of 3s. (Rs. 1½) and a shopkeeper's cess, *mohtarjia*, of 10s. (Rs. 5). In garden lands fresh imposts were levied

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Shiváji's
Settlement,
1670-1680.

Sambhájí's
Settlement,
1683.

The Sidi's
Settlement,
1699-1744.

¹ *Nachai* was assessed at from 6.56 to 5.25 bushels (3½-3 *manas*) the plough; *vareat* from 5.25 to 4.37 bushels (3-2½ *manas*); *barak* at 5.25 bushels (3 *manas*); and other inferior produce at 2.18 bushels (1½ *manas*). Or more luscious crops, hemp was assessed at 144 pounds the acre (150 the customary *baghat*), turmeric at 130 pounds (150 the customary *baghat*); and sugar at 90 to 181 pounds (93-197½ the customary *baghat*). Jervis' Konkan, 96.

² Of garden produce, cocoanuts and betelnuts paid in kind and the rest in cash. Coconut trees were inspected. All bearing less than five nuts, too old to bear any nuts, barren, or unproductive, were exempted. Of the remaining trees, half of the produce belonged to the grower and half to government, provided that in no case the government share exceeded 42½ nuts the tree. Of cocoa-palm leaves, *kajans*, the government share was for trees about to bear, three; trees that did not yield fruit, four; toddy trees, three; barren trees, one. Untotal trees, four. Betelnut trees paying from one to five *bars* were assessed like coconut trees, the limits for calculation being one and five *bars* instead of five and ninety-five nuts. Cocoa-palms tapped for toddy paid from 2s. to 3s. 1d. (Rs. 1 to Rs. 8½ each). Wild palms if tapped paid nine pence each. If not tapped they paid nothing. Jack trees, if they yielded more than 25 paks, and *nakh*, *Calophyllum*, *mophyllum*, trees paid 6d. (4 as.). Mr. Dunlop, Bom. Rev. Rec. 121 of 1825, 11, 12.

³ Jervis' Konkan, 99.

⁴ Jervis' Konkan, 109.

⁵ Shivaji was anxious for grain to store in his forts and so he able to move his troops without baggage. The Habshi had no such inducement to prefer grain to money. Jervis' Konkan, 110.

⁶ The *Udab* rates were rice Rs. 22½, *vare* Rs. 17½, *baril* Rs. 7, white sesamum Rs. 75, black sesamum, *whelpur*, *til*, *sals* and *mag* Rs. 60, *patil*, *phach*, and *kultha* Rs. 40, and salt Rs. 7. Jervis' Konkan, 111.

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*Ángria's
Settlement,
1744.*

and the sub-divisional accountant's, *sardesh hukarni's*, allowance was added to the demand, and the amount taken by the state.¹

In 1744 Ángria ousted the Sidi and held the whole of Ratnágiri.² He enhanced many taxes and added several fresh ones,³ among others new cesses on grain, sugar and hemp, a house tax, and taxes on cow-keepers and fishers. On a petition from the people, Ángria agreed that, in taking the government grain, the measures need not be heaped. To make good his loss from this concession he levied a fresh cess and added another to make up for loss by vermin. To pay for his war ships, Ángria required a proportion of the crop at a low fixed price, and to supply the ships with ropes, he levied another cess. Another change was that he took more of the rent in money. At the same time by lowering the commutation rates he considerably lessened the demand.⁴ Other new taxes were: a small levy, *kársai*, of thatch, baskets, mats, sticks, timber, firewood, torches, brooms, and earthen pots, taken nominally to keep forts and public buildings in repair, but in practice turned to his own use by every government servant down to a messenger. Oil-sellers were charged ten *shers* of oil a head and the village priest was forced to bring a weekly bundle of *pán* leaves. There were also Hindu feast taxes, a fowl or a goat at *Dasra* and a pot of buttermilk at *Gokul ashtami*. Taxes were also levied on bullocks, on wild liquor-yielding palm trees, and on makers of catechu, *káth*, Terra japonica. Finally there was a service tax on skilled craftsmen, carpenters, and blacksmiths, who were bound to serve for one month in the year at two *annas* or two *shers* of grain a day; on sailors, Khárvís and Dáldís, who were bound to supply one man in every eight able to bear arms to serve on board war ships for eight months in the year; and on low caste men including Mhárs who were bound to serve in forts one month a year and were paid $2\frac{1}{2}$ *shers* of rice a day. One important point in most of these taxes was that the headmen and managers were let off in consideration of the help they give in collecting them. The result was that the exactions pressed with crushing force on the smaller landholders. The accounts became so confused that the people could no longer follow them and they were left at the mercy of the village and district officers.⁵

*Peshwa's
Settlement,
1756-1818.*

From the destruction of Ángria's power by the English in 1756, to his own overthrow in 1818, the whole of Ratnágiri was under the Peshwa. A general survey of the Konkan was, about 1780, begun

¹ Jervis' Konkan, 111.

² Jervis' Konkan, 112.

³ On enhancement there was a rise of $\frac{1}{2}$ (2 *annas* in the rupee) on laden bullocks, and on jack, palm, and *amb* trees. Of fresh cesses there was a grain cess of from Rs. 2 to Rs. 3 a *khandi* six *annas* a *man* on turmeric and raw sugar, and 4 *annas* on hemp; a house tax of 2s. a house, widows paying 1s. (8 *annas*), and village and district officers paying nothing; a milch cattle cess from 1s. to 2s. (8 *annas* - Rs. 1) on one goat out of every score; cow-keepers, Gavlis and Dhángars, paid 10 to 30 *shers* of butter a head of cattle and 10 *shers* more a house; fishers, Khárvís and Dáldís, $\frac{1}{2}$ to one *man* of oil a head on all males between 15 and 60, and 11 *annas* of oil a boat. Jervis' Konkan, 113.

⁴ On every *khandi* or twenty *mans* of grain due, the share to be commuted into money was changed for rice from 3 *mans* at Rs. 22½ a *khandi* to 5 *mans* at Rs. 20; for *nángli* 3 *mans* at Rs. 20 to 5 *mans* at Rs. 16; for *cora* 3 *mans* at Rs. 17½ to 5 *mans* at Rs. 13½; for oilseeds 3 *mans* at Rs. 60 to 5 *mans* at Rs. 40; and for pulse 3 *mans* at Rs. 40 to 5 *mans* at Rs. 30. Jervis' Konkan, 116.

⁵ Jervis' Konkan, 115. Full details of the taxes named in the text are given in Mr. Dunlop's report (15th August 1824; Bom. Rev. Rec. 121 of 1825, '93-110).

by Nāna Fadnis, but the survey never passed south of Kalyān. Afterwards (1788-1802) two *māmlatdars*, Parsharām Rāmchandra Parānjpe and Raghunāth Trimbak Barve, surveyed Suvarndurg, Anjanvel, Ratnāgiri, and Vijaydurg. The measurements and classifications were on the same system as Annāji Dattu's survey, and the register, *pūhani khanda*, contained a record of the area of all the cultivated land held by village renters, *khots*, and peasant holders, *dhārekaris*, together with the names of the holdings and the assessment on each. No record was kept of unoccupied waste land. The *bigha* assessment was calculated in grain at fixed, *beheḍa*, rates for each kind of grain varying in different parts of the district.¹ Gardens were (1828) assessed on the same principle as grain land. In palm gardens the crop of each tree was fixed, and the value of the nuts commuted to a certain sum. If tapped for toddy the rates were raised. Other garden produce paid a *bigha* rate in kind or money.² The grain payments were commuted either wholly or in part for cash at standard, *beheḍa*, or commutation, *tasar*, rates. The standard, *beheḍa*, rates were altered only at the time of a general survey, and the commutation, *tasar*, rates were, in each sub-division, fixed every year in accordance with the ruling market prices. The poorer grains, *harik*, *udil*, *tīl*, *mug*, and *tur* were entirely subject to money commutation. Payments for rice, *nāgli*, and *vari*, were taken partly in cash and partly in kind. The grain thus received was issued for the support of the troops stationed in the forts and other parts of the district. In the south about half the revenue was received in cash and half in kind, and in the north, about one-fourth in cash and three-fourths in kind. All arrears were collected in cash calculated at the standard, *beheḍa*, which were generally higher than the commutation, *tasar*, rates.³

¹ These rates were supposed to have been fixed at some average price of former years. Mr. Reid (1828), Lithog. Papers, 10, 11.

² Mr. Reid, Lithog. Papers, 10, 11. At Bandol the practice (1824) was to tax palm gardens by the *bigha*, not by the tree. Mr. Dunlop was anxious that this plan should be introduced over the whole district. Bom. Rev. Rec. 121 of 1825, 59-61.

³ Part of the produce share was commuted into a money payment, some at an enhanced fixed conversion price, the rest at a more moderate but regulated rate. (Mr. Choplin, Bom. Rev. Rec. 16 of 1821, 517). In some parts a special system of commutation sale, *tasar fārukhta*, was introduced. Under this system the state officers received the grain, and the cultivators were, at certain fixed prices, all owed to buy it back. (Jervis' Konkan, 120). Of the 1788 survey in the Ratnāgiri sub-division, Mr. Dowell (1829) gives the following details: 'All rice land was set down as if tilled and charged accordingly. To fix the demand from hill lands, the area wanted for grazing, fodder reserves, and thatch was deducted. Then, as average hill land yields two crops in twelve years, the twelfth part of the rest was counted as though tilled for two years. During the first year it was charged for the better, and during the second for the poorer hill-crops. Similarly, as level uplands bear three in eight years, an eighth part of their whole area was charged for three years. (Bom. Rev. Rec. 225 of 1851, 278-279). In Suvarndurg and Anjanvel the practice was to recover a lump rental, *dhārabād*, from the holder's uplands independent of the area under tillage. Originally applied to rice as well as uplands, the practice was, by the 1806 survey, confined to uplands. Under this system each man was rated on the land he happened to hold at the survey time. The fields were not fixed or marked and each season the man who first began to till had a right to the use of the land. The rent was on the man rather than on the land. This practice was used by the village renters, *khots*, in a way very hurtful to yearly tenants. If a tenant left a village, the amount of his rent was taken from the *khots*' payment and transferred to the village to which the tenant had gone. Under British management this abuse was stopped. Bom. Rev. Rec. 211 of 1828, 190-192.

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History.

*Peshwa's
Settlement,
1756-1818.*

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Peshwa's
Settlement,
1759-1818.

The collection of the revenue was chiefly managed by village farmers, *khots*, who engaged to pay the whole grain assessment of the village and deliver the grain at the government granaries, *dástāns*. Of these stores there were several in each sub-division at convenient places for distributing grain to the troops and exporting it by water. In return for this the *khots* were allowed to make what bargains they pleased with the peasants who tilled *khoti* or village waste land. Many of the *khots* were men of capital, who spent large sums in bringing new land under tillage. During the latter part of the Peshwa's rule, surveys, which should have been made about once in seven years, were never carried out. In their stead the *māmlatdārs*, as they thought the villages could bear it, put on an arbitrary increase, *chudh*. To this, as it gave them much less trouble and expense than the survey, the village renters and land-holders gladly agreed.¹

The changes made under the Peshwa were generally for the worse and confirmed every injudicious practice.² The vexatious labour taxes and the demands, *kārsai*, on all articles required by government officers free of payment grew much heavier and more general.³ And under the name of court charges, *darbar kharch*, a new and very oppressive levy came into force. Originally meant to repay men in office for the expense of appearing before the Peshwa and making him presents, this tax was used by the *māmlatdār* to recover his expenses when away from his own station, and by the officers under him to make good their charges. The whole amounted to an enormous sum.⁴ Searching and elaborate as these cesses were, they formed but a small part of what was taken from the cultivator.⁵ The government officer, *lanārisādar*, who superintended the collection of the revenue, was generally some profligate unfit person who had plausible schemes for securing or increasing the revenue.⁶ Usually holding office for four years, their practice was to farm and sub-let their farms, the subordinate agents, unless an increase was agreed to, threatening the villagers with a new survey. As the *māmlatdārs* seldom had any future interest in the country, during the last years of their charge they made a point of extorting as much as they possibly could.⁷ In one important respect Ratnāgiri was better off than the neighbouring districts. Large numbers of its high class Hindus, in places of power all over the Marāṭha dominions, sent their savings to their own villages. And in Suvarandurg, Anjanvel, and Ratnāgiri were several families, who, rising to high office at the Peshwa's court, put together large estates, and

¹ Mr. Read, 6th Dec. 1828, Bom. Litig. Papers, 3, 4.

² Jervis' Konkan, 119.

³ Jervis' Konkan, 117.

⁴ Jervis' Konkan, 119. The chief cesses that had been levied under Marāṭha rule were, the measuring cess, *apantāṭ*, and *sharāṭāṭ*, the tort cess, *khāṭāṭāṭ*, the rat cess, *chakṭāṭ*, vegetable cess, *phas*, deficiency cess, *karāṭāṭ*; the rent cess, *khāṭ*, the storehouse rent cess, *khāṭāṭ*, the purchase cess, *khāṭ*; the hakim's cess, *khāṭ*, the bee-tortoise cess, *phāṭāṭ*, the salary cess, *khāṭāṭ*, the stable cess, *phāṭāṭ*, the assayer's cess, *phāṭāṭ*, the exchange cess, *khāṭ*, the butter cess, *phāṭ*, the straw cess, *phāṭāṭ*, the cow cess, the contingent charge cess, *phāṭ*, the one-year cess, *khāṭ*, the petty division expense cess, *phāṭ*.

⁵ Mr. Read, 1828, Litig. Papers, 6, 7.

⁶ Jervis' Konkan, 121.

⁷ Jervis' Konkan, 124.

⁸ Jervis' Konkan, 121.

spending money freely in improvements, had prosperous villages and very rich rice and garden lands.¹ Still, on the whole, the effects were disastrous. The *Mhats*, with larger resources, were able to meet the government demands. But the subordinate peasants were almost annihilated. Most of them were reduced to be serfs, dependent on some one who, by length of occupancy, had acquired a title to lands which had devolved on him from the necessities of their rightful owners.² Collusion and the pretext of bad seasons were the cultivator's only escape from over-taxation. The produce of the best lands was in many places reduced beyond all calculation and the general morals of the people suffered severely.³

At the time of the British conquest the district included nine sub-divisions, *tālakis*, separated in most cases by a river or some other considerable natural boundary, and each including from five to twelve petty divisions, *mahals*, *happets*, *marahas*, or *tanais*.⁴ In the nine sub-divisions there were about 2250 villages, none of them walled and few of them more than a rude cluster of thatched mud huts.⁵ A census, taken in the rains of 1820, showed a total population of 610,857 souls. This gave an average density of ninety-one to the square mile, an average house hold of 1.87 souls, and a proportion of twenty males to eighteen females.⁶

During the last years of the Peshwa's rule, the district, especially the Suvarnaburg and Anjanval sub-divisions, had suffered severely from attacks of Rámoshis under the pretender Chaurising.⁷ For some years after the British conquest, bands of Deccan plunderers continued to cause much mischief. The wall-less villages lay open to Rámoshis, Mángs, and other banditti, and the spiritless people, looking to Government for everything, yielded themselves a passive sacrifice to any gangs that attacked them. Sure of their prey, and in so hard and rugged a country almost safe to escape, bands of Mángs and Rámoshis roamed about pillaging without restraint. At first the state of things was 'almost hopeless', but as the Deccan began to settle, disorder grew less. In 1820, the robber gangs were already fewer and smaller.⁸

¹ Jervis' Konkan, 126.

² Jervis' Konkan, 115.

³ Jervis' Konkan, 124. 'As in the says most of the tenants of the original holder of small estates were superseded. Constant demands on the few who remained kept them, and as they clung to their estates like a life-line, they were compelled to do them, they involved their fields and the government in the same calamity.' Konkan, 80.

⁴ The nine sub-divisions were: Sankshi, Anjanval, Ratnagiri, Rajgiri, Suvarnaburg, Anjanval, Ratnagiri, Vaynaburg, and Malabar. Of these the first six existed between 1820 and 1830, to form part of the Rengad district. There is a confusion in the names of sub-divisions. In the statement of Mr. Pelly's report Bom. Rev. Rec. for 1820, there are thirteen names: Karnala, Sankshi, Endre, Bom. Rev. Rec. for 1820, 307; Ratnagiri, Ratnagiri, Suvarnaburg, Rengad, Anjanval, Vaynaburg, and Malabar, which in the body of the report only the name of Ratnagiri is given. See Government Report (1821) on this report. Bom. Rev. Rec. Bom. Rev. Rec. for 1821, p. 320, 361, 400. Of these names, Karnala, Karnala, Bomkot, Endre, and Ratnagiri, were probably correct.

⁵ Mr. Pelly (1820), Bom. Rev. Rec. Bom. Rev. Rec. for 1821, 334. For 1821, p. 2202. Jervis, 307 paid less than £10, 1133 between £10 and £50, 480 between £50 and £100, and 277 above £100. Mr. Pelly's Bom. Rev. Rec. for 1821, 334.

⁶ Bom. Rev. Rec. Bom. Rev. Rec. for 1824, 336, 348, 479. Pelly's statement, p. 307. There was no difficulty in taking the census and the number of error was probably not more than five per cent. In the rain season tractors from the Deccan, Gujarat, Kanara, Malabar, and other places probably brought the total to 700,000. Jervis, 308.

⁷ Bom. Rev. Rec. Bom. Rev. Rec. for 1821, 323.

⁸ Bom. Rev. Rec. Bom. Rev. Rec. for 1821, 306.

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Pelly's
Statement,
1820, 1821.

Pelly's Report,
1821.

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British Conquest,
1818.

At first revenue and other administrative details were, for two reasons, very hard to collect. On leaving the district the chief civil officers had carried away almost all the public and private records, and what little was left was destroyed in the forts.¹ The second difficulty arose from the opposition of the men who alone were able to give information. Closely bound to the Peshwa's Government by caste and family ties, they looked with dislike on their conquerors, and almost all either directly or indirectly connected with the farming of village revenues, it was their interest to keep the government officers in the dark as to the amount of their profits and as to their relations with Government and with the different classes of under-holders.²

Under the Collector and Magistrate the revenue and police charge of each sub-division, *tāluka*, with a yearly revenue of from £14,000 to £20,000 (Rs. 1,40,000 - 2,00,000), was in the hands of a native manager, *kamāvisdār*, on a monthly salary of from £15 to £20 (Rs. 150 - 200). Receiving his orders from the Collector, the manager had under him a staff of writers and messengers who looked after the police and gathered the revenue, saw that under-servants did their duty, examined and audited the petty division, *mahāl*, accounts, and prepared the whole for monthly transmission to headquarters, *huzar*. There they were examined by the Collector's secretary, *daftardār*, and arranged for the examination of the English accountants by whom they were made up and sent to the Presidency. Taking his orders through the sub-divisional manager, *kamāvisdār*, and rendering him his accounts, the officers, *mahālkāris*, in charge of petty divisions yielding a yearly revenue of from £1200 to £5000 (Rs. 12,000 - 50,000), had a suitable staff of clerks and messengers, Brāhmans, Parbhas, and Musalmāns, for it was best to mix them, engaged on revenue and police work.³

District Officers,
1818.

Under the stipendiary managers was a staff of hereditary district revenue officers styled *haddōds*, *zāmnādars*.⁴ These were, over sub-divisions, *tālukās*, the head superintendent, *sar dāshmukh* or *sar dāsū*, the head district accountant, *sar dāshkalkarni* or *sar dāshpāndā*, and the over-headman, *sar māyādām*. There was also a *rājādashmukh*. In the petty divisions, *mahāls*, *patās* and *tarāfs*, the officers were *dāgās*, *dāshkalkarnis* or *dāshpāndās*, and in some towns and villages a *māyādām* and a *mahājān*. Of the sub-divisional officers,⁵ the duties of the head superintendent, *sar dāshmukh* or *sar dāsū*, did not go beyond the signing of certain district papers. For many years before British rule they appear not to have been

¹ Rev. Durand, 142 of 1819, 2568.

² Mr. Read, 1828, (Rev. Rec. 211 of 1828, 179) says the rights of the tenants must fall from want of support. There is no other source of information but the interested *kānts*. Every hereditary district officer has from one to ten *khāt* villages, and there is not a man of the least consideration in the country who has not some share or concern in such property.

³ Mr. Pelly (1826) in Bom. Rev. Rec. 16 of 1821, 331, 332.

⁴ Mr. Dunlop in Bom. Rev. Rec. 121 of 1825, 28.

⁵ In Anjanvel, Ratnāgiri, and Vapiyburg, over the *dāshmukh* and *dāshpāndā* were the *sar dāshmukh* and *sar dāshpāndā*. They were of little use. Mr. Read, 26th August 1828; Rev. Rec. 211 of 1828, 217.

employed.¹ The head sub-divisional accountant, *sar deshkulkarni* or *sar deshpánde*, an officer peculiar to Ratnágiri, was supposed to overlook the sub-divisional accountant's, *deshpánde's*, papers in the same way as the *deshpánde* overlooked the records of the village accountant. The office was of little use as the sub-divisional accountant's papers were short enough for all practical purposes.

The petty divisional officers were the superintendent, *desái* or *deshmukh*, and the accountant, *deshpánde*, *deshkulkarni* or *mujumdár*.² Like the office of the sub-divisional superintendent, the duties of the petty divisional superintendent were nominal. All he did was to sign some papers. The office of petty divisional accountant, though essential to a connected system of records, had also fallen into disuse. Under the village renting, *khoti*, system, overlookers of village accountants and keepers of district records were not required. Their rights had been invaded and their pay attached under pretence of family quarrels and on other unknown grounds.³

The district officers were paid, some by a fixed government allowance, *moin*, and others by contributions from the people and *khots*.⁴ Their receipts from 2s. to 16s. (Re. 1-8) a village were realised from the cultivators through the village officers, and their small money perquisites from village artisans⁵ were generally recovered by their own messengers. The hereditary petty division, *mahál*, officers usually realised their dues by paying artisans something less than market labour rates.⁶

Of the four classes of villages, alienated *inám*, peasant-held *kulárgi*, rented *khoti*, and mixed *khichadi*, the peasant-held and the rented, about equal in number, were the chief.⁷ Rented villages were commoner in the northern and central sub-divisions; in the south, or Kudál *pránt*, all of the villages were peasant-held.⁸ North of Kudál as far as the Khárepátan river, till the middle of the eighteenth century, the whole was peasant-held. About the middle of the eighteenth century (1740-1755), in the struggles between the

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¹ Mr. Dunlop, 15th August 1824, in Rev. Rec. 121 of 1826, 29.

² The family of these officers, *deshkulkarnis* or *deshpándes*, generally held posts as village accountants, *inám kulkarnis*. The pay of both offices was barely enough for either and the shares were divided till they were extremely small. Mr. Reid, Rev. Rec. 211 of 1828, 199. Most hereditary district officers were also *khots*. Mr. Dunlop, Rev. Rec. 64 of 1823, 247.

³ Mr. Dunlop, Rev. Rec. 121, 1825, 30. Except Malvan where there was no office, and Anjanvel where the office was under attachment, no sub-division was without its accountant, *deshpánde*. Ditto, 34-37.

⁴ Mr. Dunlop, Rev. Rec. 121 of 1825, 28, 29.

⁵ From the artisans their dues were, 2½ pounds of oil from the oilman, jars from the potter, baskets and fans from the Mhar, a pair of shoes from the leather dresser, nails from the blacksmith, a rice pestle from the carpenter, and bangles from the Kansar or bangle-maker. These were generally commuted to a money payment of 1½d. to 6d. (as. 1-3 as. 4).

⁶ Lieutenant Dowell, 1st November, 1829: Rev. Rec. 225 of 1831, 268, 269.

⁷ Mr. Chaplin (1821) says, about an equal number are *khoti* and *kulárgi*. 21st November 1821: Bom. Rev. Rec. 46 of 1821, 510. In 1822, in northern districts, though most were rented, *khoti*, some were peasant-held, *kulárgi*, and most were mixed, *khichadi*. (Mr. Dunlop, Rev. Rec. 64 of 1823, 246). In 1824, over the whole district, *kulárgi* villages paid £4633 (Rs. 46,330) more than *khoti*. Mr. Dunlop, 15th August 1824: Bom. Rev. Rec. 121 of 1825, 53.

⁸ Mr. Dunlop, 31st December 1822: Bom. Rev. Rec. 61 of 1823, 238.

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Peshwa, Ángria, and the Sávants, the lands lay waste and many villages were deserted. In the rich coast belt fourteen villages continued peasant-held. Inland, where the soil was poorer and from time to time wanted long fallows, the people were less attached to their holdings, and the farmers were able to take the land, and as time established their position, gradually put forward proprietary claims.¹ In the south of the district, in peasant-held villages, there were village managers, *gáonkars*, village accountants, *kulkarnis*, temple ministrants, *guracs* and *ghádis*, watchmen, *múárs*, and some imperfect traces of village artisans, *balutás*.²

The village heads, *gáonkars*,³ managed the village, held the highest social place and overlooked the religious rites. At the same time they had to pay their share of the revenue like ordinary landowners and could enforce no fresh cess without the landholders' consent.⁴ They claimed, apparently with right, the title of hereditary holders, *mirásis*; in some places held Government land-grants, *ináms*; and enjoyed some rights to the unpaid service of cultivators. Their interests and rights were often overshadowed and seemed likely to be swallowed by the power and influence of the renter or mortgagee *khot*.⁵

In peasant-held villages there was an accountant, *kulkarni*; occasionally separate, but generally of the family of petty divisional accountants, *deshpánds* or *deshkulkarnis*.⁶ Their yearly receipts, from 2s. to 16s. (Re. 1-8), were generally increased at the introduction of a new survey. They had also the right to recover certain payments from the village servants, the carpenter, copper-smith, blacksmith, oilman, potter, basketmaker, and shoemaker, and in most villages at every wedding had a claim to a cocoanut.⁷

The temple ministrants, *guracs* or *ghádis*, were not ill provided for. Most temples held one or more small fields whose produce was partly set aside for lights and festivities, and partly for the support of

¹ Mr. Dunlop, 31st December 1822; Bom. Rev. Rec. 64 of 1823, 241, 242. Hill land, *raskas*, often belonged to individual peasants as much as rice land.

² Generally the only village servants are the *múárs*, *guracs* and *ghádis*. Mr. Dunlop, 31st December 1822; Bom. Rev. Rec. 64 of 1823, 252. The first officers (Mr. Pelly, 1820, Bom. Rev. Rec. 16 of 1821, 318) stated that no such municipal village establishments as the *baya balut* had ever, even by tradition, been known in the Konkan. And this view was accepted by Government (Res. in Bom. Rev. Rec. 16 of 1821, 484-487). Further inquiry showed several traces of former village establishments.

³ They were also known as *overmen*, *cartals*, and under them had generally as helpers, men styled *ambagars* or *chaughabars*. Mr. Chaplin, Bom. Rev. Rec. 16 of 1821, 155.

⁴ Mr. Dunlop, 31st December 1822; Bom. Rev. Rec. 64 of 1823, 239.

⁵ Mr. Dunlop, Bom. Rev. Rec. 64 of 1823, 243. Mr. Dunlop mentions an officer styled *ambikari*, apparently a village superintendent standing in the same relation to the *deshmúth* or *desh* as the *gáon kulkarni* stood to the *d. gáonb*. They had become as useless as the *deshmúth*. Mr. Dunlop, 1824, Bom. Rev. Rec. 121 of 1825, 29. Except in the south the *khot* was practically the village headman. *Pabals* still existed, but their power had long merged in the *khot*. Except certain privileges the *pab* had little to mark him from the other villagers. Bom. Rev. Rec. 16 of 1821, 318.

⁶ Mr. Reid, 26th August 1828; Bom. Rev. Rec. 211 of 1828, 199.

⁷ Lieut. Dowell, 1st November 1829; Bom. Rev. Rec. 225 of 1851, 265, 269. This applies strictly only to the Ratnágiri sub-division.

the *gurav*. Besides this they on all village festivals¹ had a claim to a meal, a cocoanut, and betel leaves and nuts. Of village artisans there was no regular staff. They held no free, *inám*, land and without this help the people were too poor to support them. Except washermen and barbers, who in some cases received yearly grain allowances, village artisans were paid only when they performed certain special work.²

The village watchmen, *mhárs*, were very numerous and fairly well paid. In the south they called themselves hereditary holders, *mírásis*. In some places they had Government grants of lands and they had various privileges and perquisites. As in peasant-held, *kulúrqi*, villages the holders watched their own fields, the *mhárs* were less useful and less highly paid than in rented, *khoti*, villages.³

Except in the south of the district the whole management of the village centered in the renter, *khot*.⁴ Saving some small immunities, as exemption from the house tax, *pátils* had little to distinguish them from other cultivators. Few rented villages had an accountant. The whole revenue settlement, between himself and the cultivators on the one hand and himself and the Government on the other, was managed by the *khot*.⁵

In the south of the district, where no actual measurements had been made, the grain was assessed according to an old (1698) survey framed on an estimate of the seed wanted to sow the land and of the probable outturn of the field.⁶ To the original demand many

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¹ Mr. Dunlop, 15th August 1824; Bom. Rev. Rec. 121 of 1825, 51. The *shádis* were children of dancing girls, *bharcias*. Though called the servants of the god, they went on the headman's messages and received village contributions. Bom. Rev. Rec. 64 of 1823, 243.

² Lt. Dowell, 1st Nov. 1829; Bom. Rev. Rec. 225 of 1851, 269, 270.

³ Lt. Dowell, 1st November 1829; Bom. Rev. Rec. 225 of 1851, 266. Their dues were (1829) not fixed on the yearly tillage but on the original, *am*, gram revenue. The ordinary rate was one *patil* the *am* of what was paid to the *khot*. They realised about one-half of the claims and generally got about three *khopdis*, reaped a small profit by acting as messengers to the *khot*, and from each hereditary holder, *ratandir*, when they went to see him about the revenue, they got a meal or half a meal. Besides this their houses and the grain and jack trees in their gardens were held free of payment. Sometimes the hereditary holders, *ratandirs*, of the village agreed to change the *mhárs'* rates of pay. Mr. Dunlop (1824) says *mhárs* had a right to carcases and to a meal, a cocoanut and *pan supari* on all village festivals, marriages, and village rejoicings. Bom. Rev. Rec. 121 of 1825, 50, 51. Mr. Dowell says the *mhárs* are not ill provided for. Their houses are free from the house tax. In *khoti* villages the *khot* allows the *mhárs* a small field in lieu of a grain payment. Bom. Rev. Rec. 225 of 1851, 269, 270.

⁴ As head of the village the *khot* had fees varying from 2s. to 16s. (Re. 1-8). Like the accountant they could claim a cocoanut at each wedding and pay the village craftsmen less than the market labour rate. Bom. Rev. Rec. 225 of 1851, 268, 269.

⁵ Mr. Chaplin, Bom. Rev. Rec. 16 of 1821, 518, 519. People were entirely at the *khot's* mercy for there were few accountants, *kalkarais*, to check the village papers. Mr. H. P. Pelly, Collector, 18th December 1820; Rev. Rec. 16 of 1821, 318, 319, 327. So also Mr. Dowell (1829) says: 'When a peasant-held village becomes rented the accountant loses his place.' Bom. Rev. Rec. 225 of 1851, 266.

⁶ Mr. Dunlop, 31st December 1822, Bom. Rev. Rec. 64 of 1823, 238. The old settlement was made in 1698 by Ganu Rám an officer of the Vádi government. Each field was rated at a certain amount, *kanla*, of gram. Since 1698 occasional additions or deductions had been made, but there had been no general revision. Mr. Reid, 6th December 1828, Lithog. Papers, 9, 10.

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cesses had, from time to time, been added. They were distributed by the village managers on each estate in proportion to its produce and to the owner's condition. The Vadi and Kolhápúr governments sometimes took the rental in kind and sometimes in money.¹ Over the rest of the district the government demand was fixed according to certain acre, *highárni*, rates supplemented by the levy of cesses and taxes. In theory the acre rates should have been revised by a survey about once in seven years.² In practice, in some parts for fifteen and in other parts for fifty years, no survey had been made. Instead of a fresh survey the government officers had more or less arbitrarily increased the village rental so that in many places the rates were very unequal.³ The supplemental cesses and taxes, varying in the different sub-divisions, were in each sub-division fairly uniform⁴ bearing a certain fixed proportion, usually about one-half, to the original rental.⁵ The original rental was taken part in grain and part in money. The cash share was calculated either at an enhanced fixed conversion price or at a more moderate but regulated rate.⁶ Of the supplemental cesses and taxes, *pattis*, some were levied in money and some in grain. Among the grain cesses some were commuted for a money payment.⁷ The share of the rental taken in grain was received at the government granaries, *dásháns*, and sold by auction.⁸

In peasant-held, *kulárni*, villages the records were kept by the accountant, *kulkarni*, in the same way as in the Deccan. In rented, *khoti*, villages the *khot* kept the accounts showing only the Government original demand and the cesses. This, whatever he might have levied from his tenants, he entered regularly and uniformly every year. Government did not know what the tenant paid or whether the *khot* gained or lost by the farm. In mixed villages the peasant holders, *dhárekari*s, paid direct to Government, and in the Government accounts the rental of their lands was kept distinct from the rental of the *khot*'s lands. The accountant kept a note of the peasant-held land and the *khot* kept a note of the rest.⁹ At the time of conquest village accounts were in the greatest disorder. The entries, on loose slips of paper, left openings for all sorts of fraud.¹⁰ Originally few and simple, grain commutation and fresh cesses had

¹ Mr. Reid (1828), Lithog. Papers 9, 10.

² Mr. Pelly, Bom. Rev. Rec. 16 of 1821, 321.

³ Mr. Reid (1828), Lithog. Papers 3, 4, 13.

⁴ Mr. Chaplin (1821), Bom. Rev. Rec. 16 of 1821, 511.

⁵ Mr. Reid (1828), Lithog. Papers, 6-8.

⁶ Mr. Chaplin (1821), Bom. Rev. Rec. 16 of 1821, 517. Mr. Reid (1828) adds the following details: The inferior grains, *barak*, *ndal*, *bil*, *amra*, and *tur*, were subject to an entire money commutation, *darabast basar*. Of the better class of grains, *bhat*, *angli*, and *pari*, half was commuted, $\frac{1}{4}$ higher than the established rates, *bachhi*, and $\frac{1}{4}$ lower, and half was taken in grain. In Salshi, Vijaydurg, Ratnágiri, and Anjanvel one half, and in Savandurg one-quarter was taken in money. Lithog. Papers, 6, 8.

⁷ Mr. Reid (1828), Lithog. Papers, 12, 13. Mr. Chaplin (1821), Bom. Rev. Rec. 16 of 1821, 517.

⁸ Mr. Reid (1828), Lithog. Papers, 11, 12.

⁹ Mr. Chaplin, Bom. Rev. Rec. 16 of 1821, 519. Compare Mr. Dunlop, Bom. Rev. Rec. 121 of 1825, 21. In former surveys the fields belonging to peasant holders, *dhárekari*s, were entered in their own names. Those belonging to the *khot* were entered in the *khot*'s name.

¹⁰ Mr. Dunlop, 15th August 1824; Bom. Rev. Rec. 121 of 1825, 54, 55.

made the entries complicated beyond measure.¹ The labour of keeping the accounts of a moderately sized village was enormous. It was almost hopeless to trace thieving or fraud. Though they were free from fractions, so complicated were the entries that only practised accountants could make them out. It was hopeless for the peasants to try to understand them.²

There were four classes of landholders, grantees of estates, *inámzárs*, village renters and managers, *khots*, peasant holders, *kulárágs* and *dhárekáris*, and tenants, *ardhelis*. There were many grantees of villages, *inámzárs* and *saranjámzárs*, whose cultivators were either peasant holders, *dhárekáris*, or tenants-at-will, *ardhelis*. The grantees were continued in their former position standing in the same relation to the cultivators as Government did in other villages, merely receiving what but for the spontaneous action of alienation Government would itself have collected.³

The village renters and managers, *khots*, were a special class.⁴ Both directly as village managers, and through their close connection with the hereditary revenue officers,⁵ the *khots* were so completely masters of the district records that the early British officers were baffled and balked in their attempts to settle their relations to Government and to the different classes of under-holders. Of the village farmers or renters,⁶ at the beginning of British rule, some had and others had not title deeds, *sanads*. The original grants date from the reign of Yusuf Ádil Sháh (1489-1510) of Bijápur,⁷ and show that they were in some cases made with the object of restoring the villages to prosperity.⁸ Only a small proportion of the *khots* represented the holders of the original grants. Grantee *khots* were found only in the strip of land between the Bánkot and Khárepátan rivers. North of the Bánkot river no *khots* held grants.⁹ In the extreme south near Málvan there were (1818) no *khots*.¹⁰ From Málvan north to the Khárepátan river the *khots* had either gained possession by mortgage from the peasant proprietors, or they were the representatives of

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1818.
Inámzárs.

Khots.

¹ Mr. Dunlop, 15th August 1824; Bom. Rev. Rec. 121 of 1823, 58. ² Ditto, 15.

³ Mr. H. P. Pelly Collector to Gov. 537, 18th December 1820; Bom. Rev. Rec. 16 of 1821, 312-318.

⁴ Much of the materials for this account of the *khots* has been taken from Mr. E. T. Candy's compilation. Bom. Gov. Sel., New Series, CXXXIV.

⁵ All the officers of the district were connected with the *khots*. Bom. Rev. Rec. 211 of 1823, 179.

⁶ The word *khot* means farmer or renter. In one of the oldest deeds *khot* and *izárdár*, that is farmer, are used as synonymous. Mr. Dunlop (1824); Bom. Gov. Sel. CXXXIV. 13.

⁷ Mr. Chaplin, 21st November 1821; Bom. Rev. Rec. 16 of 1821, 519, 520. Mr. Pelly (18th December 1820) says it is believed that they were introduced at the time of Nizám Sháh. Rev. Rec. 16 of 1821, 319. Mr. Chaplin's is the correct account (see above, p. 195).

⁸ Some of the grants state that the village was nearly waste and the people petitioned for a *khot*. Mr. Candy in Gov. Sel., New Series, CXXXIV. 5.

⁹ In the north Konkan, wrote Mr. Chaplin in 1820 (Bom. Gov. Sel. CXXXIV. 2), the right of a *khot* to hereditary succession either never existed or had been entirely disregarded. To the older inhabitants of north Konkan, wrote Mr. Pelly in 1819 (Bom. Gov. Sel. CXXXIV. 1), the *khot* is purely a contractor. To them the idea of an hereditary contractor is ridiculous.

¹⁰ Mr. Hale (1813-1818). Bom. Gov. Sel. CXXXIV. 6.

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farmers to whom, about the middle of the eighteenth century, certain villages had been rented. None of them seem to have held deeds.¹ Among grantee *khots* were many whose title was of later date than the times of the Bijápur kings. Some held under Moghal (1690-1720), others under Marátha (1750-1818) grants, and the deeds of a third class passed by local, *subha* or *mahál*, officers were under the Peshwa held to give no certain rights.² When the British first took the Konkan, it was thought by some that certain *khots*, who held *sanads* or title deeds, were entitled to special hereditary rights and privileges not possessed by those *khots* who simply passed an agreement from year to year. In practice, however, the British Government have never seen reason to make any distinction between those *khots* who can and those who cannot produce documents relating to or confirmatory of their occupation of these villages. Some few of these deeds are no doubt real title deeds, but many of them are merely decisions by the Peshwa's and other courts on disputes between different claimants.³

The *khots* had hereditary rights as village renters and managers.⁴ How far they had proprietary rights was doubtful.⁵ The *khot* was

¹ Mr. Dunlop, Bom. Rev. Rec. 64 of 1823, 242. Of the southern *khots* even those with the strongest power and position were, according to Mr. Dunlop, 'pure farmers'. Bom. Gov. Sel. CXXXIV. 8.

² In the last years of Bájiráo's government (1795-1818) the district was farmed to men who cared neither what they, nor what their predecessors, granted. Deeds for the same village had been passed by three or four officers. Mr. Dunlop, 31st December 1822; Bom. Rev. Rec. 64 of 1823, 244. According to Major Jervis (Konkan, 77), *khots* who gained their estate by mortgage or in other way than by direct succession, had the duties, but something short of the privileges of a grantee *khot*. It has been estimated that not one-sixth of the whole body of Ratnágiri *khots* are holders of title deeds. Mr. Nairne to Government, 8th April 1875.

³ Mr. A. T. Crawford, C. S.

⁴ *Vatandár khots* claim an hereditary and indefeasible right and under the late government freely pawned and sometimes sold their offices. Mr. Chaplin, Bom. Rev. Rec. 16 of 1821, 519. It cannot be questioned that the villages are farmed. Mr. Pelly, December 18, 1820; Bom. Rev. Rec. 16 of 1821, 321. Whatever their origin it has grown into a regular established and acknowledged right of farm. Mr. Chaplin, Bom. Gov. Rev. Rec. 16 of 1821, 520.

⁵ The grantee or *vatandár khots* were farmers of the rent of the village. Mr. Chaplin, Bom. Gov. Rev. Rec. 16 of 1821, 519. Without a deed a *khot* has no proprietary right in the village soil (Judgment in Tazubár's case (1866), Bom. Gov. Sel. CXXXIV. 85). Unless a deed contains words expressly granting the ownership of the soil it must be held that the ownership of the soil was not granted. (Bombay High Court Reports, VI. 199). It may well be doubted, says Mr. Candy (Bom. Gov. Sel. CXXXIV. 85) whether any of the old deeds expressly granted ownership in the soil. They run something like this: You are from generation to generation to enjoy the hereditary farm, *khóti ratan*, of the village and the honour, *mainpan*, that goes with it. You are to spread tillage, to pay the Government revenue, and to live happily. There is nothing in the grants, says Sir H. B. Ellis (2nd February 1874), that gives the slightest colour to any pretension to proprietary rights in the land. The only deed quoted by Ráo Sáheb Mandlik (Brief History of Vatandár Khots, 6) that seems to grant ownership in the land is dated 1833. So again, the *khot's* claim of a sort of hereditary right in everything in the village has always been disallowed by the manager of the district. (Bom. Gov. to Directors, 3rd May 1826; Rev. Letters to Directors, Vol. 18, 234). Captain Wingate (1851) stated that at first the British officers imagined the *khots* to be proprietors of their villages (Bom. Gov. Sel. II. 15), and Mr. Candy says (Bom. Gov. Sel. CXXXIV. 85) innumerable extracts from old records might be made to show that the *khot* had some proprietary right. As far as has been traced Government, as in the passages quoted above, was, from the first, careful neither to style nor to consider the *khot* a proprietor.

not only the farmer of the revenue, he was also a Government officer bound to perform certain duties, to conciliate and superintend the cultivators, and to help the Government in collecting the revenue and distributing the Government demand.¹ The great power which the *khot's* position, as renter and manager of the village, gave him was limited on the one hand by the right of Government to increase the village rental and oust the *khot* if he refused to pay,² and on the other hand by the custom of the country which prevented the *khot* from recovering from the bulk of the villagers more than a certain share of the produce.³

Khots were of all castes, but chiefly Musalmáns, Maráthás, Parbhús, and Bráhmáns. The original *khots* were in most cases Maráthás or Musalmáns. The Bráhmáns were chiefly new men who had come to the front in the latter part of the eighteenth century in the years of Bráhman power and Bráhman misrule.⁴ Of all conditions, *khots* as a class were rich, and from their connection with the native district officers very powerful.⁵

The early British officers divided the under-holders into two main classes, peasant holders, *kulírags* or *dhárekáris*, and tenants, *ardhelis*. The lands of peasant holders were entered in their own names, those of tenants in the *khot's* name. Peasant holders kept their land on almost the same terms as the Deccan *mirásdárs*.⁶ The right of the peasant holders to their land was admitted. Except at a new survey their rent was not liable to be raised.⁷ Those in the south of the district, where the *khots* had little power,

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¹ Jervis' Konkan, 74-79. When a *khot* died without heirs Government handed over his office to a new family charging the new *khot* a fine or succession fee. Lieut. Dowell, 1st November 1829; Bom. Rev. Rec. 225 of 1851, 266.

² In the oldest (1595) collection of *khoti* papers a case is cited in which a village was taken from a *khot* and given to another on his agreeing to pay a larger sum. (Bom. Gov. Sel. CXXXIV. 13). Mr. Turquand (1837) (ditto 4) states that the Peshwa transferred *khoti* villages without the *khots'* consent. But on agreeing to pay the enhanced rental the *khot* would seem to have always been allowed to resume his management (see Bom. Gov. Sel. CXXXIV. 4, 13, 33). He was not stripped of his *khotship* unless he passed a formal deed, *bedava patra*. Government had the power to enhance its demand on the introduction of a fresh survey. Fresh surveys were originally made once in six or eight years. (Mr. Chaplin, 1820, in Bom. Gov. Sel. CXXXIV. 34). But as described above, under the Peshwa it was usual to enhance the demand by agreement and without any survey. (See above, p. 218).

³ Mr. Pelly (1819) says the lower class of tenants generally pay one-half of the produce. To oust a regularly paying tenant would be thought a hardship. (Bom. Gov. Sel. CXXXIV. 11). Mr. Chaplin also notices one half the produce as a limit. (Ditto 12).

⁴ Mr. Chaplin (1821) and Mr. Dowell (1829) in Bom. Gov. Sel. CXXXIV; see also Bom. Rev. Rec. 16 of 1821, 519. Villages under Marátha *khots* did not flourish. Mr. Dowell (1829) cites the case of a chief *khot* of the village of Ori spending some years in Satára on 4s. (Rs. 2) a month taking care of a Bráhman's turban and shoes. The family was so poor that they could not raise 30s. (Rs. 15) to rebuild their house. 1st November 1829, Rev. Rec. 225 of 1851, 258.

⁵ The *khots* are of almost every caste and condition in life. Some are poor peasants, some are men of wealth and intelligence. Bom. Gov. Sel. II. 2.

⁶ Lieut. Dowell (1829), Bom. Rev. Rec. 225 of 1851, 259. One point of difference seems to have been that it was doubtful whether the Ratnágiri peasant holders had the right to sell their land. Jervis' Konkan, 78. Mr. Pelly (1818) said it was generally believed he could dispose of his property. Bom. Rev. Rec. 16 of 1821, 314.

⁷ Mr. Chaplin, 1821, Bom. Rev. Rec. 16 of 1821, 315.

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were (1822) consulted by their village managers before any new cess was levied. Each, with a voice in the village management, had a sense of his own consequence and felt himself of importance and respected. They were the best class in the country.¹ Besides the peasant holders from whom the Government assessment only was recovered there were some bodies of reduced peasant holders who had agreed to pay the *khot* something more than the Government demand. These holders, from paying this additional demand, were known as *dasparkaris*, who on every *khandi* paid an extra Rs. 10, *didparkaris* who paid one and a half instead of one *man*, and *duparkaris* who paid two instead of one *man*.² From men of this class the *khot* could not exact the eighth day labour tax, *ath veth*.³ The rest of the cultivators were grouped by the first British officers under the general head of half-crop payers, *ardhelis*. Among these they believed there were some from whom the *khot* could not take more than a fixed amount and whom to oust would be held a hardship,⁴ and others whose only safeguard was the fear of the *khot* that if he extorted too much the land would be thrown up.⁵ The early officers admitted that the *khots* had baffled their attempts to find out the true position of their tenants. They were strongly impressed with the need of a survey.⁶ Unless a register was kept the rights of the tenant must fall from want of support.⁷

In two respects the system in force at the beginning of British rule was a success. Under it all the arable land of the district had been brought under tillage,⁸ and the revenue was realised with ease and

¹ Mr. Dunlop, 31st Dec. 1822; Bom. Rev. Rec. 64 of 1823, 239. If a peasant holder left the village, his land lapsed to the *khot*. But if the holder within a certain vague time and under certain vague conditions came back and claimed the land, the *khot* had to restore it. Mr. Reid, 26th April (1828); Bom. Rev. Rec. 211 of 1828, 183.

² Mr. E. T. Candy; Bom. Rev. Comp. 1071 of 1876. In the south was (1822) a class who had fallen lower than this. They had pawned their rights as holders and agreed to pay the mortgagee half their grain produce. Mr. Dunlop, Bom. Rev. Rec. 64 of 1823, 242.

³ Mr. Pelly (1820), Bom. Rev. Rec. 16 of 1821, 314. Under the British the *khots* tried to enforce this cess from the peasant holders, but Mr. Pelly stopped it. Ditto, 317.

⁴ Mr. Pelly (1820), Bom. Rev. Rec. 16 of 1821, 315, so also Mr. Chaplin (1821). Custom has fixed half the produce as the limit of rent. Local usage rules the rate. Bom. Rev. Rec. 16 of 1821, 514.

⁵ Mr. Chaplin, Rev. Rec. 16 of 1821, 512-514. The *khot* had power of ejectment, and the peasant had no right to land except on such terms as he could settle with the *khot*. They were bound only by the ties of mutual interest. Mr. Chaplin, Bom. Rev. Rec. 16 of 1821, 512-514. Half produce, says Mr. Dunlop (1822), seems to be the utmost limit of assessment from tenants. They often got better terms and were then called *khandkaris* or *mukhdars*. In both cases, unless otherwise provided for, they had to perform one day's service in eight, *ath veth*, for the *khot*, and pay Government a house and miscellaneous, *karsai*, cess. Bom. Rev. Rec. 64 of 1823, 248, 249. Some of the half-crop tenants, *ardhelis*, held on lease, *ulthi*, *istiva*, and *kaul*, others on a mere verbal agreement, *ukti*. Jervis' Konkan, 80.

⁶ In 1822 Mr. Dunlop urged a survey, and in 1823 Government agreed that a survey was the only means to guard the under-holders against oppression. Bom. Gov. Sel. CXXXIV, 13.

⁷ Mr. Reid (1828), Rev. Rec. 211 of 1828, 179. The result of the Ratnagiri survey (1826-1829) was to show a large proportion of customary tenants, that is tenants who could not be called on to pay more than a customary rate.

⁸ There was (1824) no waste land available to grant as assignments to *patis*. Mr. Dunlop, Bom. Rev. Rec. 121 of 1825, 10, 41. Considering the character of the country it was surprising how large a harvest it yielded. Of the whole produce at least four-fifths was rice, and besides *ragh* and *carri*, there was a gram grown to

without remissions.¹ As a class the *khots* were well off. The more respectable were men of capital who laid out money in bringing new land under tillage.² The best lands in central Ratnágiri had been recovered by extensive embankments from the sea.³ Of the peasant holders some were in distress, others were substantial farmers.⁴ The half-crop tenants had two safeguards against the *khot's* oppression: the fear that if too much was asked the land would lie waste, and the right of appeal to Government against over-exaction. The scarcity of waste land and the power of the *khot* to seize the house and goods of any tenant who left his village,⁵ and to transfer to the village he went to the share of the Government demand the tenant had formerly paid, made the first safeguard of little use.⁶ With the help of the custom that the *khot's* demand was not to go beyond one-half of the crop, the appeal to the Government was of some practical value.⁷ Still it was very hard for his tenants to combine against a *khot* and they were (1819) generally deep in his debt and wholly at his mercy.⁸

In every respect, in spirit, intelligence, and comfort, the half-crop tenants were far below the people of Gujarát and the Deccan.⁹ Among them a man wearing a decent turban or ever so coarse a dress attracted attention as being above the lower orders.¹⁰ No money passed (1821) among them. The *khot* advanced grain for seed and food and in return took their crops. In a *khot's* village it was rare to see a rupee in a tenant's hand. In the deepest poverty, almost in villanage, they looked to the *khot* as their sole master and

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make oil and feed cattle. Little gram and not much wheat was planted. The whole of the rice lands were flooded in the rains. As in Bombay the rice was sometimes sown broadcast, but generally in beds and afterwards planted out. Rice lands were, according to quality, assessed at different rates. The best grew sugarcane, turmeric, and ginger. Some small watered tracts yielded double crops. Mr. Pelly (1820), Bom. Rev. Rec. 16 of 1821, 328, 329.

¹ Mr. Pelly (1819), Bom. Gov. Sel. CXXXIV. 5. Except in cases of extreme distress, neither in rented nor in peasant-held villages were remissions allowed. Mr. Chaplin (1821), Bom. Rev. Rec. 16 of 1821, 513.

² Mr. Pelly (1820), Bom. Rev. Rec. 16 of 1821, 319, 320.

³ Mr. Dunlop (1822), Bom. Rev. Rec. 64 of 1823, 255.

⁴ Mr. Chaplin (1821), Bom. Rev. Rec. 16 of 1821, 523.

⁵ The *khots* (1828) claimed the houses, and in some cases even the cattle and stock of cultivators, who, having settled in their village, might retire to another. Mr. Reid, Bom. Rev. Rec. 211 of 1828, 192.

⁶ This practice was known as *dhánabál*. The effect, says Mr. Reid (1828), was that the *khot* felt no interest in conciliating his tenants or in making them easy and contented. Bom. Rev. Rec. 211 of 1828, 190-192.

⁷ Mr. Dunlop (1822) says the practice of former governments authorizes ours in establishing rates to restrain the exactions of *khots*. Bom. Rev. Rec. 64 of 1823, 247. So Mr. Turquand (1857) says the Peshwa occasionally interfered (Bom. Gov. Sel. CXXXIV. 4); and the Joint Judge in Tazubar's case (1866) speaks of the Peshwa removing a *khot* for oppressing the cultivators.

⁸ Mr. Pelly, Bom. Gov. Sel. CXXXIV. 10. Undisputed rights were (1819) fraudulently withheld by the *khots*. One great cause of the success of the *khots'* encroachments was the trifling amount each individual was called on to pay. It bore no proportion to the expense and trouble of making a complaint. (Mr. Dunlop, 31st December 1822, Bom. Rev. Rec. 64 of 1822, 247). At the time of the conquest, writes Mr. Crawford (28th December 1873), population had increased and all the arable area was tilled. The *khot* could get what terms he pleased. He no longer hesitated to rackrent, and was sometimes able even to oust his tenants.

⁹ Mr. Chaplin (1821), Bom. Rev. Rec. 16 of 1821, 522.

¹⁰ Mr. Pelly (1820), Bom. Rev. Rec. 16 of 1821, 343.

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landlord.¹ A great number could not afford themselves or their families the luxury of a full meal of any sort of grain even once a day.² Too listless to grow vegetables, they preferred trusting to forest produce, gathering firewood, gallnuts *hirdās*, and red flowers *dhāyṭi*. From these and occasional labour hire, they bought their blankets and other scanty clothing.³

The early British officers made no change in the system of fixing and gathering the revenue. At first (25th August 1818) the Collector, Mr. Pelly, suggested that the district should as soon as possible be surveyed.⁴ Afterwards a fuller knowledge of the distressed state of the country led him to advise delay. The revenue of the year (1819-20) showed an increase of ₹33,201 (Rs. 3,32,010) on the amount realised in the year before. This was due to no rise in the rate of rents. Grain was dear and the prices fetched at the government auction sales were much higher than was expected. The mode of collecting the land revenue was in no way changed. It was taken in kind according to the ancient custom of the Konkan.⁵ Next year (1820) Mr. Pelly recommended that native surveyors should be brought from the Habsán, and under the Collector's superintendence, one or two sub-divisions should be surveyed and settled for five years. Mr. Pelly was strongly of opinion that except in removing oppressive and improper imposts and correcting abuses, for a few years in revenue matters local customs, *shirastás*, should be closely followed. The land could be measured, classed, and assessed according to usage. The landholders would gain because the Government demand from each would become clearly known and easily found out, and the appointment of village accountants would gradually give a knowledge of the true position of the *khots* and help Government to recover rights then fraudulently withheld.⁶ Government agreed with Mr. Pelly that there could be no doubt of the objectionable tendency of the *khōṭi* system and of the need of curtailing the *khōṭ's* authority and subjecting him to control.⁷ Before

¹ Mr. Chaplin (1821), Bom. Rev. Rec. 16 of 1821, 507-526. The *khōṭ* made the greatest possible profit by leaving the husbandman the least possible share. The only limit was the absolute necessities of nature. He allowed the peasant no more than his existence required. Still they were said to treat them with kindness and to be generally popular. Their villages were quite as good as peasant-held villages. (Bom. Rev. Rec. 16 of 1821, 521-523). Mr. Dunlop (1822) speaks of an oppressive taxation and an impoverished, dispirited, and degraded people. (Bom. Rev. Rec. 64 of 1823, 276). The villagers are (1820) much in debt to the *khōṭ* and wholly at his mercy (Bom. Rev. Rec. 16 of 1821, 326, 327). Deeply indebted to their *khōṭs*, many are little better than abject slaves. In some degree time has reconciled them and where this may not be the case the habit of dependence has deprived them of the spirit and confidence as well as the means of providing for themselves. (Mr. Dunlop, 1822, Rev. Rec. 64 of 1823, 250). In 1824, Mr. Dunlop wrote, 'though, since the transfer of the district, the position of the cultivators has certainly improved, their circumstances are still bad enough. The most carefully prepared statements I can frame have left the cultivator without the means of subsistence. No doubt I have been imposed on. But I am satisfied that they live on incredibly little.' (Bom. Rev. Rec. 121 of 1825, 79, 80).

² Mr. Dunlop, Bom. Rev. Rec. 121 of 1825, 80, 81.

³ Mr. Dunlop, Bom. Rev. Rec. 121 of 1825, 81.

⁴ Bom. Rev. Rec. 16 of 1821, 323.

⁵ Mr. Pelly, 18th December 1820; Bom. Rev. Rec. 16 of 1821, 310.

⁶ Bom. Rev. Rec. 16 of 1821, 326.

⁷ Bom. Rev. Rec. 16 of 1821, 455.

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other changes were made the number of rented, *khoti*, and peasant-held, *kulárgi*, villages should be recorded and an inquiry made into the rights of the different classes of landholders.¹ As regards a village staff, Government were of opinion that while the *khot* was the fittest agent for police and revenue duties, it was of great importance to introduce the office of village accountant.² To improve the village watch it was proposed that bands of Rámoshis should be entertained.³ Mr. Pelly's (16th December 1820) proposed commutation scale for the grain rental was also sanctioned.⁴

During this year (1820) Ratnágiri was visited by a destructive attack of cholera that from one end of the district to the other daily carried off numbers. Besides from this epidemic the district suffered severely. In May a storm of wind and rain caused great damage by land and sea. Between Anjanvel and Goa about forty coasting vessels were totally wrecked, and at Rájápur, about £10,000 (Rs. 1,00,000) of property, including much Government grain, was washed away by the rise of the river. In the south the dams of two large ponds, Kumbhármát and Dhámápur near Málvan, burst, and at the salt works much damage was done. Remissions to the amount of £319 (Rs. 3190) were granted.⁵ In 1821, though the Rámoshis and Mángs were less troublesome than some years before, gang robberies, believed to be the work of discharged fort garrisons, were very distressing.⁶ Mr. Elphinstone, when on tour in Ratnágiri in 1823, was impressed with the loud complaints against the English Government. The bad feeling was, he thought, due to the Bráhmans who had supplied almost all of the Peshwa's civil and many of his military officers, and whose priests greatly missed Báji Ráo's lavish bounty.⁷ As *khots* the Bráhmans had almost unlimited power and their habits of business and intrigue gave them such an influence that they made the common people adopt views most opposed to their real interests.⁸ Mr. Elphinstone strongly advocated the establishment of village accountants, and the conversion of rented, *khoti*, into peasant-held, *kulárgi*, villages. Though so old an institution the *khots* caused the bitterest discontent. Their arbitrary exactions and their demand of one day's work in eight were the subject of common complaint. Consistent with the *khots'* rights every measure should be taken to raise the villagers out of their thralldom. A survey would be very difficult. The *khots*

¹ Bom. Gov. Letter, 28th June 1821; Bom. Rev. Rec. 16 of 1821, 498, 499.

² Bom. Rev. Rec. 16 of 1821, 485, 486, 489. Their wish that a staff of village accountants should be appointed had already been brought to the notice of the district officers. Gov. Res. 18th November 1820; Ditto, 486.

³ Bom. Rev. Rec. 16 of 1821, 487.

⁴ The rates were for the *khandi* of sweet rice £2 2s. to £2 8s. (Rs. 21-Rs. 24), for *nágli* £2 4s. 3d. to £2 14s. (Rs. 22 as. 2 - Rs. 27), and for *vari* £1 14s. 3d. to £2 (Rs. 17 as. 2 - Rs. 20). These rates at first fixed for the south were afterwards extended to the whole district. Bom. Rev. Rec. 16 of 1821, 535, 541. According to Mr. Gibson these rates were in some sub-divisions fifty per cent higher than the old rates.

⁵ Mr. Pelly (1820), Bom. Rev. Rec. 16 of 1821, 687, 688, 697.

⁶ Bom. Gov. Letter, 28th June 1821; Rev. Rec. 16 of 1821, 503.

⁷ Báji Ráo used to send £50,000 (Rs. 5,00,000) a year in charity into the south Konkan. Government to the Directors, 5th November 1823; Bom. Rev. Rec. 17 of 1823, 84.

⁸ Gov. to the Directors, Bom. Rev. Rec. 17 of 1823, 85.

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would thwart and corrupt it. Still Mr. Dunlop should make a beginning. He should find whether tenants, *ardhelis*, had any rights in which Government could protect them, and whether there was any limit beyond which the *khots*' demands should not be allowed to go.¹

Equal rates and good village servants were, in Mr. Dunlop's opinion, the only means for bettering the mass of the people.² Without a survey, equality of rates could not be ensured. Measurements were accordingly pressed on in different parts of the district. But as the staff was untrained and wanted European supervision, the results were not trustworthy. Still they brought to light the great roughness and unevenness of former surveys, proving that the tillage area was double and in places treble what had formerly been returned.³ As regards tenures, inquiries showed that over the whole district the revenue paid under the peasant, *kulárgi*, system was £1633 (Rs. 46,330) more than the revenue paid by farmers, *khots*. Mr. Dunlop proposed some changes in village management which, he thought, would greatly increase the amount of peasant-paid revenue and give so great a preponderance to the more favourable tenure, that the *khots* would be kept back from oppressive acts by the fear of their people moving into peasant-held villages.⁴ The chief changes were that the *khots* should be kept on as headmen, and their pay be made to depend on the prosperity of their villages by assigning them a small quantity of grain from each rent-paying field. At the same time a staff of village accountants should be introduced, so that the managers, *kamárisdárs*, might find out the truth of all claims to abatement of revenue.⁵ In parts of Málvan Mr. Dunlop proposed reductions in the assessment rates. Those were, he thought, the only over-assessed parts of the district.⁶ Besides this lowering of rates, Mr. Dunlop thought (1824) that the farms of certain forest produce and several miscellaneous cesses should be abolished.⁷

Changes in the village staff were also pressed on. *Khoti* villages were being surrendered and arrangements were made to choose one of the *khots* as the head or manager. In the south, the headmen's payment had some years before (1818-1820) been fixed, by an assignment of five or three per cent of the village rental. This system, with some change of rates, Mr. Dunlop thought should be introduced over the whole district.⁸ The inquiry into the system

¹ Government to the Directors, Bom. Rev. Rec. 17 of 1823, 93.

² Bom. Rev. Rec. 121 of 1825, 79.

³ Mr. Dunlop, Bom. Rev. Rec. 121 of 1825, 65-68.

⁴ Mr. Dunlop, Bom. Rev. Rec. 121 of 1825, 53, 54.

⁵ Mr. Dunlop (21st December 1822), Bom. Rev. Rec. 64 of 1823, 252.

⁶ The reason for lowering the rates was the fall in the price of rice from £14s. to £1 (Rs. 12-Rs. 10) a *bhara*. Bom. Rev. Rec. 64 of 1823, 269.

⁷ Bom. Rev. Rec. 121 of 1825, 81-85. The farms of firewood, gallnut, and a red flower used as a dye, of selling coconuts in the parts of the district where they did not grow, the sale of betel leaves, and the sale of cattle.

⁸ His proposals were, villages yielding less than £50 (Rs. 500) at six per cent; villages yielding from £50 to £100 (Rs. 500-1000) four per cent; from £100 to £200 (Rs. 1000-2000) three per cent; from £200 to £300 (Rs. 2000-3000) two per cent; and one per cent on all above £300 (Rs. 3000). Mr. Dunlop, 15th August 1824; Bom. Rev. Rec. 121 of 1825, 38-47.

of keeping village accounts had shown that though most villages in the district had nominally an accountant, the duties were very carelessly done. The members of the accountants' families generally arranged among themselves to hold the office in turn. And so it happened that the village accountant was often a man from Sindia's or Holkar's court utterly ignorant of the village, never visiting it except when, perhaps once in fifteen years, his turn came. Nor was their work supervised, for the office of divisional accountant, *deshpánde*, was, as a rule, in the hands of the village accountant's family.¹ Each family should, said Mr. Dunlop, be called on to choose one of their number for the constant exercise of the duty,² and instead of on loose leaves the accounts should be kept in regular books. Accountants were greatly needed as a check on the *khots*. One great source of *khot* exactions was the mixing of public and private claims. If a cultivator showed that he had been called on to pay more than he ought, the *khot* was never at a loss. The excess was said to have been taken on account of some old debt or other private transaction. The *khots* would oppose the change; but this could not be helped. Without village accountants remissions were useless. Attempts to better the state of the people only went to enrich the *khots*.³

In some ways the change of Government pressed heavily on the district. The large amount of savings and pensions that used to flow into it from officers in the Peshwa's service ceased, and instead of consignments of treasure from Poona for the support of the garrisons much of the revenue was sent to Bombay.⁴ At first neither the revenue nor the judicial courts worked well. In the revenue courts there were no records from which the people's claims could be tested. They made frequent complaints, but they did not promote their interests by complaining. It was generally better for them to submit to imposition.⁵ To get to the judicial court, *adálat*, was, from many parts of the district, a long journey. Without a small stock of ready money the journey could not be made, and as many of the people had no cash and no means of raising cash, the new system opened a way for fraud and oppression and pressed hardly on the poor.⁶ On the other hand the demand for unpaid labour was stopped, grievances were redressed, and several of the most oppressive and unpopular cesses remitted. Though unquestionably improved the people were still very badly off, many of them eking out a living by gathering forest produce.⁷ Without proper village establishments and equal assessments there was little hope of lasting improvement."

On this report of Mr. Dunlop's, Government (10th January 1825) decided, that though the *khot's* claim to an hereditary right in every thing in the village had always been disallowed, they had an

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¹ Mr. Dunlop, 15th August 1824: Bom. Rev. Rec. 121 of 1825, 47, 48.

² Bom. Rev. Rec. 121 of 1825, 49, 50.

³ Ditto, 33, 34.

⁴ Mr. Dunlop, Bom. Rev. Rec. 121 of 1825, 78.

⁵ Ditto, 22.

⁶ Ditto, 85-88.

⁷ Ditto, 79-81.

⁸ Ditto, 79.

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hereditary claim to their farms with which it was neither just nor politic to interfere. It was not the wish of Government to make the *khots* give up their position and office. Improvements should be confined to ascertaining and securing the rights of other classes without setting aside the *khots'* established claims. Of the husbandmen, the peasant-holders, *dhárekaris*, were the only class who had rights limiting the power of the *khots*. To find out the rights of the peasant holders some period of good Marátha government should be chosen and from the records of that time it should be discovered whether the rent due by the peasant holder, *dhárekari*, to the village farmer was fixed. If the farmer made any further claim he would have to prove it. If the peasant holder, *dhárekari*, could not establish a limit to the farmer's claim of rent, the average payment in past years was to be fixed as the future rent, the peasant holder, if he could, proving any exemption. Peasant holders, *dhárekaris*, such as those in Suvarndurg, who had made over some of their original rights to the village farmer, could not, unless fraud was proved, claim to be restored to their former position. In their case, as in the case of the full peasant holders, any limit of the farmer's demand should be carefully maintained. Yearly tenants, *ardhelis* or *upris*, who moved from place to place as they were tempted by favourable terms, and who had not even a usufructuary right to the soil, had no need of Government interference. Competition among the *khots* would secure them proper pay. If the *khots* combined against them the yearly tenants could be tempted to peasant-held, *kulárgi*, villages. Perfect freedom to move was all that men of this class wanted and this they seemed to have. The introduction of a survey was approved. A beginning should be made in some place under the Collector's eye, and progress should be very gradual. Village accountants should also be appointed, and arrangements made to ensure peasant holders against exactions. But care should be taken that the accountant did not meddle with the farmer's rights.¹ To appoint headmen, *pátils*, to rented, *khoti*, villages would only lead to the clashing of authority. The better plan would be to make the *khots* responsible for the village police.²

In the want of information as to who were peasant holders with a claim to limit the *khots'* demand, and who were shifting labourers with no rights which Government could protect, these instructions would seem to have added considerably to the *khots'* power. Within three years (1828), in the country south of the Bámkot river, the *khoti* system was complete. Most villages were purely *khoti* without a single peasant holder, the rest were mixed and peasant-held. In mixed villages the *khots'* power was gradually spreading as he claimed the land and was held answerable for the revenue of absent peasant

¹ Under these orders no more accountants were sent to *khoti* villages. In peasant-held villages the accountants worked well. With correct accounts and receipts the people were free from the oppression of the headmen. Mr. Reid, Bom. Rev. Rec. 211 of 1828, 193, 194.

² Bom. Rev. Rec. 121 of 1825, 231. These instructions, in due course (Despatch dated 6th August 1828; Bom. Rev. Rec. 6, 1825-1831, 17) met with the approval of the Court of Directors.

holders. Instead of occasionally hinting at a claim to land not in the hands of peasant holders, the *khots* now openly avowed and maintained their claim to proprietary rights.¹ Meanwhile two despatches (4th May 1825, 23rd May 1827) came from the Court of Directors dwelling strongly on the degraded state of the people and on the right and duty of Government to protect them from the *khots*' exactions.² The result of this strong expression of the views of the Home Government was twofold. An attempt was made to change rented into peasant-held villages, and a survey of the Ratnágiri sub-division was begun. The introduction into *khoti* villages of a peasant-holding, *mirási*, system recommended by Government was not found practicable.³ At the same time, many villages in the northern sub-divisions, formerly rented, were resumed and managed by Government through the agency of village accountants. In these villages the attempt was made to raise the tenants to the level of peasant holders. But they were so poor that they preferred having a man of capital between them and Government, who would advance them the petty sums they wanted and help them in their tillage.⁴ Still the inquiries then made brought to light the important fact

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¹ Mr. Reid, 26th August 1828 ; Bom. Rev. Rec. 211 of 1828, 174, 175, and 176-179.

² In reply to the early accounts (23rd February and 27th November 1822) of the state of Ratnágiri the Court of Directors wrote (4th May 1825) : We can by no means rest satisfied that the interests of the villagers or of any portion of them should remain without protection against the exactions of such a class of men as the *khots*. We recommend it to you in a most particular manner not only to ascertain and protect the existing rights of the peasants, but to ameliorate their situation, and relieve them from any claims which operate upon them severely or oppressively. If any privileges of the *khots* are inconsistent with the required arrangements, it may be equitable to allow compensation for the loss of even a hurtful privilege, the right to which is well established or of long standing. But in all cases it is necessary to put an end to the causes of abuse and to powers which can be exercised only to the disadvantage of the community. (Court's Letters (Bom. Rev. Rec. 1825-1827), 5, 7). Again in reply to Bombay Government letter 5th November 1823, the Court wrote (23rd May 1827) : The grand evil in the south Konkan is the undue power of those headmen of villages called *khots*. By their exactions in the way both of money and labour, and probably also by other methods of oppression, the cultivators are reduced to a state little better than slavery. It is the natural consequence of this oppression that the people's character is degraded, and that they should be addicted to drunkenness, idleness, and lying. The first step to improvement is to protect the cultivators. The demands on the cultivators should be defined and this both for demands on their labour and on their money. Government should effectually interfere to ensure the due limitation as well as the exact definition of the demand. (Court's Letters, Bom. Rev. Rec. 5 (1825-1827), 107-110). Again (14th November 1827) they said : The exposure of the cultivators to constant pillage is ruining the country. The rights of the people as established by their own customs should be ascertained and they should be protected in their exercise. (Court's Letters (Bom. Rev. Rec. 1825-1827), 5, 258-260). These and the letter of 6th August 1828, which gives no details, are the only despatches between 1825 and 1828 traced in the Bombay Records. But other more definite orders would seem to have been received to restate the reduced peasant holders of Suvarndurg in their original position. See Bom. Gov. Letter 1907 of 1828, 12, in Bom. Gov. Sel. CXXXIV, 17.

³ Mr. Reid, 26th August 1828 ; Bom. Rev. Rec. 211 of 1828, 176. At the same time the people of the peasant-held villages near the coast were so much better off than those of rented villages, that Mr. Reid regretted that the peasant tenure was not prevalent throughout the country. Ditto, 175.

⁴ Mr. Reid, 26th August 1828 ; Rev. Rec. 211 of 1828, 183, 184. These villages would seem to have been all north of the Bankot creek. The *khots* who was thus preferred by the people to the direct system was not the type of *khots* who claimed hereditary rights. They were tanners to whom the villages were rented annually or for a term of years.

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that the *khot's* tenants were not all yearly tenants or shifting labourers, that there was a class of peasant holders reduced by the encroachments of *khots*, who had for years tilled their fields on paying the *khot* a fixed part of the produce. With an hereditary right to their fields these tenants were not liable to be ousted so long as they paid their share of the produce. It was this class of men whose rights had from the first been so carefully concealed by the *khots* and *khot*-connected district officers, and who, since the Government resolution of 1825, had suffered still more by the rough classification of all half-crop payers, *ardhalis*, as shifting labourers without occupancy rights.¹ To define and secure the rights of these occupancy holders Mr. Reid strongly advised a fresh survey.

In 1827 Lieut. Dowell, with a few native surveyors, was appointed to survey the Ratnágiri sub-division. In this survey the acre, equal to one and a quarter *bighás*, was made the unit of measurement. In other respects the Peshwa's system of measuring and classifying was not changed. In the places first surveyed the chain and cross staff were tried. But as the ground was waving and the fields were small, the old plan of measuring lengths and breadths by rods, *káthis*,² was afterwards adopted, with this difference, that instead of being thrown over the arm, the rod was laid flat on the ground. The former classification of soils was well suited to the country, and was continued unchanged. The rice land was divided into twenty-two sorts each with a distinct name and paying a special grain assessment. The uplands, *varkas*, were either hill or level. The hill uplands were lightly assessed, each of the fourteen hill grains paying a different rate. Under the name of customary discount, *vaja shirastábul*, deductions from the actual area of rice and uplands were made on the same scale as in Annáji Dattu's survey. All the measurements were recorded and the areas of the fields and their boundaries entered in a village ledger, *khatívni*. Maps were prepared showing the relative position of the fields and villages on the scale of 200 feet to an inch and of five inches to a mile. The survey extended to all the villages now in the Ratnágiri and Sangameshvar sub-divisions and the petty divisions of Saitavda and Lánja. The records of the new assessment of several villages were ready by the end of 1829, but owing to the difficulty of fixing the *khot's* rights, the settlement was not carried out, and in 1830, survey operations were stopped.³ Like Mr. Reid's inquiries, Mr. Dowell's researches into the details of the actual tenure of land⁴ served to show how important a class of villagers held a position between peasant holders and yearly tenants. The lands in a rented, *khohi*, village were

¹ Mr. Reid, 1828. Rev. Rec. 211 of 1828, 176-179.

² The old Maratha rod of 9 feet 4 3/4 inches was increased to 10 feet 5 1/4 inches, so that, as was the case with the *bighat*, 100 square *káthis* might go to the acre.

³ Mr. J. R. Gibson. Mr. Candy (Bom. Gov. Sel. CXXXIV. 20) says the survey inquiries went on till 1833 and were then stopped chiefly from the difficulty of settling the claims of the Vishálgañ chief.

⁴ Lt. Dowell has left in three closely written volumes the results of his inquiries, between November 1829 and May 1830, from all kinds of people. His opinion is entitled to great weight. Mr. Candy, Bom. Gov. Sel. CXXXIV. 21, 29.

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partly divided among the villagers, partly undivided. The divided lands were held partly by members of the *khot's* family, partly by peasant holders. These hereditary cultivators, *vatandár kardás*, were the descendants of original peasant holders, *dhárekáris*, who had come under the power of the *khot* and paid him rent. Of all castes, but chiefly Kunbis, they formed the bulk of the people. Each family, or cluster of houses, bore the same name, tilled a fixed share of upland, and managed the crops and fallows without reference to the *khot*. At seed time the *khot* went round and examined the fields, and at harvest he again went round and gathered his dues.

As a rule a tenant, *karda*, who paid his rent could not be ousted by the *khot*, nor so long as he tilled the usual share, could the *khot* or any other tenant cultivate within his bounds. If a *khot* wished to oust a troublesome tenant, his only means was to assess his fields above what he could pay. If a tenant's family fell sick, so that part of his lands were waste, the *khot* might give them to a stranger to till or he might divide the waste part among the neighbouring tenants. When, even after many years, the tenant's family became able to till their lands they might oust the new tenants. If the family never returned, their land became deserted, *guyál*, and lapsed to the *khot*. The undivided land, generally the poorest uplands and not more than a quarter of the village area, was called common, *gárik*. Its tillage was, under the *khot*, carried on partly by villagers, but more often by strangers.¹ Even among the stranger peasants all were not shifting labourers. Some, though they held no land in the village, were hereditary holders, *vatandár kardás*, in a village close by. The tillers of common lands were like Deccan *upris*, the *khots* standing in the place of Government. The cultivators under the *khot* both holders, *kardás*, and waste tillers, *bádhekaris*, were called half or third produce payers, *ardhulis* or *tirdhelis*. The share of the produce due from them to the *khot* was fixed every year by agreement between the *khot* and the cultivator. A few days before harvest they went together round the fields, estimated the produce of each field, and after haggling over it, agreed to the quantity to be paid.² When, as often happened, the *khot* and the cultivator could not agree they chose a jury, *tirháit*, of the chief villagers. The only check the cultivator had on the *khot* was his recollection of the agreement made. In cases of poverty or loss the *khot* remitted a little revenue. In bad seasons the loss fell on the *khot*, and the *khot* gained by Government remissions. The tillage in *khoti* villages was poor, as, under the system of yearly estimates, the people had little motive to make improvements.³

¹ These strangers were either called waste tillers, *bádhakarís*, or outsiders, *dalandis*. All waste tillers, *bádhakarís*, were not shifting labourers or yearly tenants. Many of them had been settled for generations in the same village and had been given occupancy privileges. See Bom. Gov. Sel. CXXXIV, 25.

² The assumed share of the *khot* varied in uplands from $\frac{1}{4}$ to $\frac{1}{2}$; in rice land it was about $\frac{1}{2}$. The cultivator had from his share to pay the fees due to the village servants, *mhar* and *gaurat*, and meet the cost of the yearly sacrifices, Mr. Dowell (1829) in Bom. Gov. Sel. II. 12.

³ Mr. Dowell in Bom. Gov. Sel. II. 12.

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On the whole the result was to show that even in rented, *khoti*, villages, except the small area of common, *gacik*, and of deserted, *gayál*, land which was managed by the *khot*, the land was divided among, and held in perpetuity by, permanent cultivators, *kardás*, whom the *khot* had no right to dispossess and from whom he could exact no more than the recognized share of the produce and some additional cesses according to the usage of the village.¹

No action would seem to have been taken on Mr. Dowell's survey report, and the survey was not extended beyond the Ratnágiri sub-division. But his inquiries had shown that a large body of the *khot's* tenants had customary or occupancy rights, and the practice was introduced of renewing the grant of the village to the *khot* only on condition of his promise not to act oppressively and to respect the villagers' rights.²

1830-1840.

Between 1830 and 1840 the district officers held the most opposed views regarding the position of the *khot*. In 1833 a village was rented to a *khot* under a deed giving much wider rights than those granted in the old Musalmán and Marátha deeds.³ About the same time (1835), Major Jervis was doing his utmost to prove that the *khots* had no proprietary rights, and that of late years they had gained powers over the cultivators to which they had no claim, and been freed from services they were bound to perform.⁴ Two years later Mr. Glass the Collector (5th May 1837) supported the view that in purely

¹ Capt. Wingate, 30th January 1851; Bom. Gov. Sel. II. 14. Mr. Candy (Bom. Gov. Sel. CXXXIV. 29), who thinks Captain Wingate's summary not quite correct, divides the lands of a rented, *khoti*, village into two classes, (A) Lands held by the *khot's* family, (B) Lands held by the *khot's* tenants. The lands held by the *khot's* tenants were (a) held by hereditary landholders, *vatandar kardás*, who had lasting rights including, in most cases the power to mortgage and sell their fields; (b) common, *gacik*, land belonging to the *khot*. This was either waste or deserted. The tillers of the common land, whether hereditary landholders or outsiders, tilled this part as the *khot's* tenants-at-will. Mr. Dowell's notes established two very important points that an hereditary tenant had, under the Peshwas, the right to appeal to the Government against the action of his *khot* (p. 27), and that a fresh tenant gained hereditary, *watan*, rights by the gift of the *khot*, by lapse of time, or by building a stone house. The variety of cases cited would seem to show that this process of rising from the position of shifting labourers or yearly tenants to that of hereditary tenants with occupancy rights was common and widespread. (See Gov. Sel. CXXXIV. 23-29). The origin of the grant of customary rights was in the rivalry among the different village renters to tempt peasants to settle in their villages. It is important, says Mr. Crawford (28th Dec. 1873), to remember that while the settlement of the district was going on, peasants were in demand and could gain good terms from the village renter who dared not re-ent or oppress them. Sir George Campbell's description of the origin of occupancy rights among Bengal tenants applies to the earlier stages of the settlement of Ratnágiri. The endeavour of the landlord was to get new customers. Men were the only riches and the struggle of a good landlord was to get men by the offer of favourable terms. The newcomer settled on waste land, tilled and stocked it, built his house and dug his well at his own expense and by his own labour. Hence he was given all the rights and privileges of resident cultivators. Quoted by the Honourable Mr. Melvill, in Mr. Candy's Summary of Khoti Reports (1873), 23.

² Examples of the clauses from time to time introduced in these agreements are given in Bom. Gov. Sel. CXXXIV. 80, 81.

³ Mr. Mandlik (Vatandar Khots, 8) gives this translation: "You are to understand that the lands and fields, trees and bushes, water-courses, grass, wood, stones, and all rights are your ancestral property." How different this is from the old deeds will be seen from the example quoted above, p. 226.

⁴ Jervis' Konkan, 74, 75.

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rented villages the proprietary right centred in the *khot*. He admitted that the direct tendency of the system was to keep the tenants, *andhelis*, in the deepest poverty. Still he held that the *khots* treated their tenants with a certain degree of liberality, and that, though never flourishing, they seldom suffered from absolute want.¹

In 1833, after some years of very cheap grain, the district profited by a rise in prices due to a failure of crops in the Deccan.² The improvement seems to have continued during the next year. Order was unbroken, the revenue easily collected, prosperity seemed increasing, and all classes were satisfied with the revenue management.³ In 1837 there were very heavy later rains, the crops were damaged, and cholera and cattle disease caused much loss.⁴ Many cesses, among them an oppressive house tax, were abolished, and an order was issued that money payments at the ruling market rates were to take the place of the part payments in kind.⁵ The rains of 1838 were very scanty. The rice crop suffered greatly and as the stock of grain was small, the price rose higher than it had been since 1824. There was much distress, and grain had to be brought from Malabar.⁶ In peasant-held villages remissions to the extent of £5570 (Rs. 55,700) were granted. During 1838-39, in addition to fifty-five villages already under Government management, fourteen *khoti* villages were thrown up. In the Collector's opinion the Government demand was too high. He proposed that the commutation rates should be lowered and cesses yielding in all £10,528 (Rs. 1,05,280) should be abolished.⁷ These proposals were sanctioned by Government, and with a very favourable season in 1840 the district greatly recovered.⁸

A few years later (1845) the question of the *khots'* position again came under discussion. In reporting on some villagers' complaints of illegal levies by the *khot*, one of the district officers stated that in his opinion, though the *khot* could not raise the grain rental, provided he gave notice and made an agreement with the people, he could

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¹ Bom. Gov. Sel. CXXXIV. 30.

² Mr. Forbes, 26th September 1833; Rev. Rec. 550 of 1834, 124, 125. The years of very cheap grain (1826-1832) had lowered the value of land. Before this fall in value the best rice lands fetched from £15 to £20 (Rs. 150-200) an acre, good dry grain land £6 (Rs. 60), and strong hill land £1 4s. (Rs. 12). The 1829 rates were somewhat lower. Lieutenant Dowell, 1st November 1829; Bom. Rev. Rec. 225 of 1851, 267.

³ Mr. Elliot, 4th Sep. 1834; Rev. Rec. 550 of 1834, 153. This is strangely opposed to Major Jervis' (1835) opinion (Konkan, 105) that the cultivators in the neighbouring native states were more contented and infinitely more prosperous than under the British. Government had abolished many distressing taxes. But the constant need for remission showed that the demand was still too high. Ditto, 36.

⁴ Jamabandi Rep. 1837-38; Rev. Rec. 975 of 1839, 17-19.

⁵ Rev. Rec. 975 of 1839, 14, 45, and 1099 of 1840, 28, 29. In spite of this order part of the rental continued to be taken in kind.

⁶ Jamabandi Rep. 1838-39; Rev. Rec. 1099 of 1840, 22-24.

⁷ Jamabandi Rep. 1838-39; Ditto, 32-34.

⁸ Rev. Rec. 1345 of 1842, 122, 123. The cesses on bullocks, buffaloes, and goats were abolished in 1839. Rev. Rec. 1099 of 1840, 91. A fixed rate of commutation, instead of the enhanced *usar* and *farghla* rates, was sanctioned in 1840. Rev. Rec. 1242 of 1841, 68.

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levy such taxes on miscellaneous produce as he chose. Government held that it was monstrous that while limited by the custom of the country to a certain portion of the produce, the *khot* should by irregular levies raise the demand to a rackrent. Still, though the law gave Government power to stop vexatious levies, this power must be used with care, lest Government, in their desire to relieve the people, should deal unfairly with the *khots*. In the opinion of Government nothing but a correct field survey and classification could afford the data on which alone justice could be done to all parties.¹ Accordingly, in 1849 (22nd August and 26th September), Captain Wingate the Survey Superintendent was called on to report on the advisability of undertaking a survey and revision assessment in Ratnágiri. Captain Wingate's absence in Europe for some time delayed his report. On his return, after studying all the land tenure and land management records, discussing the different questions with Mr. Coles the Collector, and himself making local inquiries, Captain Wingate (15th January 1851) wrote a most complete account of Ratnágiri and its peculiar land system.

Captain Wingate's
Report,
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The district contained 1336 villages and hamlets distributed among five sub-divisions, Suvarndurg, Anjanvel, Ratnágiri, Vijaydurg, and Málvan. Its barren rugged surface was fully cultivated.² Wherever there was soil, even to the tops of the highest hills, by the plough or by the pickaxe, grain was grown. The uplands, *varhas*, were tilled as often as they could yield a crop,³ and their trees were stripped of branches and leaves for manuring the rice beds. Something more might be done by terracing hill sides, but all level spots where water drained were turned to rice lands. Much of this land was poor. But along the creek with the salt water shut out by masonry walls and earth banks, were many rich gardens yielding two crops of rice, or sugarcane and vegetables.⁴ The district suffered much from the want of roads. Carts were unknown, the tracts were in many places dangerous to man and beast, and of many villages the whole produce went to market on men's heads.⁵

From the healthiness of the climate and the freedom from small-pox, the district teemed with people. Though industrious and hard-working the women and even the children sharing in the most toilsome field labour, they failed to grow grain enough for their support. Large numbers left the district in search of work. Bráhmans as civil officers and clerks, and Maráthás and Mhárs in the police and army, received in pay and pension a sum nearly as large as the whole district revenue. Besides this, an even larger sum was brought

¹ Bom. Gov. Sel. CXXXIV. 32.

² There is little, if any, unappropriated waste in the district Bom. Gov. Sel. II. 7.

³ The best uplands bore crops for five or six years and then wanted five or six years' rest, poorer lands wanted longer rests, and the worst yielded only twice in twelve years. From the increased pressure of population, crops were raised once in four or five instead of as in 1829 in six years. Bom. Gov. Sel. II. 7.

⁴ Bom. Gov. Sel. II. 7.

⁵ Bom. Gov. Sel. II. 21.

back yearly by the crowd of labourers who, starting for Bombay and the districts round, at the beginning of the fair weather (November) came back with their savings before the burst of the rains (June). In this way without the help of manufactures the district paid for its imports of grain. But there was little margin. Inland where there was no fishing or sea trading to help, almost all the people looked half-starved and many for months had not a full meal.¹ The revenue system of estimating the Government assessment in produce, and taking some of it at fixed money rates and the rest either in kind or with reference to the prices of the season, was cumbrous in the extreme.² In a large proportion of the villages the rates were believed to be burdensome.³ Of the two chief classes of villages, peasant-held, *kulárgi*, and rented, *khoti*, the peasant-held were much the fewest, not one-tenth of the whole.⁴ The peasant-held villages mostly along the coast and the banks of salt water creeks, though more highly assessed than the rented villages,⁵ were much richer. Vastly more capital had been sunk in them. In many cases the land had been greatly improved by digging wells, banking out the sea, and even by the toilsome plan of bringing earth from a distance to cover bare rock.⁶ In these villages the arable lands were divided into a certain number of holdings, *dhára*. Each of these holdings, often scattered fields sometimes only one plot or even only one tree, had at some former survey been entered in the name of the representative of one of the original families. Each holding bore the charge fixed at the last survey. By inheritance, mortgage, and sale, the holdings had become greatly sub-divided, and had occasionally altogether changed hands. Of their internal management Government took no account. Each year some one of the sharers became responsible for the payment of the sum due on the entire holding, and by private arrangements recovered their rents from the other sharers and from his own tenants. The accountant kept a record of each holding under its original name, showing every year the name of the manager. If the sharers failed to choose a manager the Collector attached and managed the holding till the sharers paid any deficiency and took back the management.

The rented, *khoti*, villages, though much more numerous than the peasant-held, were far more backward. The *khot* was one of the worst of landlords. Claiming more right in the soil than the under-holder admitted him to have, he strove to keep the under-holder from gaining any more rights and to reduce him to be a tenant-at-will. The *khot* was often so deep in debt and his estate so divided among sharers, that however much he might wish it, he could do little for the good of the village. Supposed to take from the under-holders one-half, one-third, or one-fourth, he could and often did take more. There was no proper check on his estimate

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1851.¹ Bom. Gov. Sel. II, 15, 16.² Ditto, 20.³ Ditto, 23.⁴ Ditto, 7.⁵ In 1829, in Ratnágiri, the average acre rate in peasant-held villages was 7s. 1½d. (Rs. 3 as. 8 p. 9), and in rented villages only 2s. 5d. (Rs. 1 as. 3 p. 4). Bom. Gov. Sel. II, 9.⁶ Bom. Gov. Sel. II, 9.

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of the crop. He often settled it without seeing the field, and forced the under-holder to accept his estimate. Formerly, in case of a difference, it had been usual to refer the dispute to arbitrators. Now the *khot* was grown so powerful that this safeguard was of little use. In such a state of things it was idle for Government to lower its demand in *khoti* villages. The *khot* would as before squeeze from the under-holder as much as he could. Such a concession would be simply a boon to the *khot*; it would in no way better the state of the cultivator.¹

Captain Wingate was satisfied that over a large body of the under-holders, the *khot* had no right to exercise unlimited power. Mr. Dowell (1829) had shewn that in the Ratnágiri sub-division the bulk of the land was held by permanent tenants whom the *khot* had no right to oust. The rights of the *khots* in other parts of the district were, Captain Wingate understood, much the same as in Ratnágiri. All the *khots* with whom he had talked, indirectly admitted that, without his consent, they could not take the land of a permanent tenant and give it to some one else.² The rights of a *khot* fell far short of ownership of the soil. The members of the *khots'* families held much of the best land in *khoti* villages, but this they held as permanent cultivators not as *khots*. As the members of the *khot's* family got hold of the best land, the original holders were mostly obliged to content themselves with poor uplands, and in this their ancient rights were, to a greater or less extent, admitted. So strong was the feeling of hereditary right, that even in villages peopled entirely by the efforts of the *khot*, the lapse of two or three generations would, in the people's opinion, constitute a tenant right. Any attempt on the part of a *khot* to oust a tenant with occupancy rights would be viewed as an act of glaring injustice and oppression. The rights of permanent tenants were free from taint; the exercise by the *khot* of the power of ousting permanent tenants was based on usurpation. It was true that under early British management the want of information about the class of occupancy or customary tenants had led to the bulk of them being treated as yearly tenants or shifting labourers. Since then, inquiry had, in Captain Wingate's opinion, proved that the great body of tenants had occupancy rights.

Government had power by passing an Act, if not by issuing an order, to regulate the relations of the *khot* and his tenants. Still the question remained, how far was it advisable to interfere? No change in the *khoti* system could remove the district's poverty. This was the result of the pressure of over-population on a poor soil. Still it was beyond doubt that the *khot's* unrestrained power was evil. The tenant took no care to improve his lands as he knew the *khot* would reap the fruit of his toils. Government did not care to grant remissions or to lower its demand as they knew their bounty would benefit no one but the *khot*. The eighth day, *áth vith*, tax of unpaid labour was a burden on the people. Formerly, when only

¹ Bom. Gov. Sel. II, 17.

² Bom. Gov. Sel. II, 14.

the richer soils were tilled, the tenants had leisure and the tax was light and useful. Now most tenants had to work as labourers and the tax was to them a heavy and direct loss. In any case the labour tax should be stopped. This was not enough. The power of the *khot* must be controlled so as to secure to all tenants, except those of common, *gúvik*, land, a limit beyond which the *khot's* demands might not pass. This might be secured either by abolishing the *khots*, or by defining the relations between the *khots* and their permanent tenants. *Khots* could be abolished only if it was impossible to modify or reform their claims. The claims could be limited by recording the present usage and forbidding change. But the power of the *khots* made a true statement of present usage impossible. A survey might frame a record of all the village lands, and in the case of permanent tenants, one-half, one-third, or one-fourth of the produce might be fixed as the limit of the *khot's* demand. Common, *gúvik*, land might be managed as the *khot* pleased, except that no rent of more than one-half of the produce should be levied. If this mode of settlement lowered the *khot's* rents the Government demand should be proportionately reduced. Besides in fixing the *khot's* demands a survey would do good by revising assessments. The present rates both in rented, *khoti*, and peasant-held, *kulárgi*, villages were oppressively high and prevented the improvement of the land. The digging of wells and the banking out of salt water still went on in peasant-held villages. But in rented villages the outlay of capital was very small.¹ Besides lowering oppressive rates and changing the Government demand from the cumbrous system of part money, part grain, and part cess payment, a survey would do good by fixing the boundaries of villages, estates, and to some extent of shares of estates. The ignorance of everything connected with landed property was a fruitful source of litigation.² At the same time, though useful in making reforms the survey would, from the extreme sub-division of lands, be very costly, and instead of adding to it would, from the fact that the whole arable area was under tillage and that the existing rates were very high, probably end in a reduction of the Government revenue. In an overcrowded district like Ratnágiri, where the land had been extensively sold and transferred, it would not be advisable to change existing assessments. So many years had passed since the last survey, that lowly assessed land had risen in value and the present holders who had probably paid a high price for them would be unable to bear any fresh burdens. In so rugged and minutely divided a district, it would be a work of great time, labour, and cost, to survey separately the land of every holder. The village boundaries should be laid down, and in gardens, rice plots, and the leveller dry crop lands, the limits and areas of the several holdings should be fixed. But steep hill sides, worked only by the hand and of extremely small value, might be left unsurveyed. The relative values of the surveyed plots, ascertained by a classification adapted to the peculiarities of the garden, rice, and dry crop tillage, would, with a

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record of tenures and other village circumstances, supply materials to regulate the assessment when it was found to want amendment.¹ In Captain Wingate's opinion, before undertaking a complete survey, an experiment should be made in some detached villages.²

Mr. Townsend the Revenue Commissioner, in forwarding Captain Wingate's letter, expressed his opinion (10th March 1851) that the present assessment was unequal and in many cases burdensome. Though it might end in a sacrifice of revenue, it was, in his opinion, the duty of Government to make their demands lighter and more equal. The right of Government to make a new survey and to change the rates of assessment was undoubted. He thought there was no need of an experimental survey and that the measure should include at least one sub-division. He thought that in some cases so much was taken from the *khots* that they could not help being bad landlords. It must not be forgotten, he said, that the *khots* have rights as well as their tenants, and while in the case of hereditary tenants the *khot's* demands should be modified and controlled and the labour tax abolished, there was a class of tenants-at-will in whose case a certain amount of manual labour was part of the rent.³ On these papers Government decided⁴ that a survey of Ratnágiri should be begun. In surveying gardens, rice plots, and level dry crop lands, convenient sections should be measured off and their limits fixed by boundary marks. The fields and sub-divisions of each section should be measured, classed, and assessed separately, and recorded as subordinate numbers. Except so far as was necessary to fix village boundaries, steep uplands should not be surveyed. In the course of the survey, the particular terms on which each field was held, and the length of time it had been in the hands of the present holders and their ancestors should be recorded in the survey papers. The officers appointed to settle the relations of the *khot* and his permanent and yearly tenants ought, in the opinion of Government, to have special powers given them under a legislative enactment. The provisions of the Act could not well be fixed till after an experimental survey had been made. They would probably include the abolition of the service tax, *áth veth*, the absorption of all cesses into one rate, the fixing of the rents payable to the *khot* by permanent tenants, the declaring of the occupancies of permanent tenants and possibly also of tenants-at-will transferable, and the assignment to the *khot* of a percentage in lieu of all his claims.

Mr. Kemball was appointed survey officer and Mr. Coles the Collector was directed to arrange for the survey of a few peasant-held, *kulúrgi*, and rented, *khoti*, villages. In 1852 Mr. Kemball reported the results of the experimental survey. In spite of the vague powers and privileges claimed and exercised by the *khot*,

¹ Bom. Gov. Sel. II. 22.

² Bom. Gov. Sel. II. 23.

³ Bom. Gov. Sel. II. 3.

⁴ Letter 10,555, 8th November 1851. Bom. Gov. Sel. II. 25-27.

Mr. Kemball was satisfied that his hereditary rights were limited to the office of village renter and manager, and did not extend to the ownership of the village land. Trustworthy information about Kunbis' rights was very hard to collect.¹ Their tenure of rice patches was in a measure undisputed, but over the uplands, *varkas*, their rights were undefined.

The result of this inquiry satisfied Captain Wingate that for the settlement to have a chance of success, the rents payable by cultivators must be fixed. This, in Captain Wingate's opinion, could be done without injustice to the *khot*. Except over the lands which they held as occupants, the rights of the *khot* did not go beyond collecting the rent and cesses payable by the cultivators in accordance with the village custom. The *khot* managed the village as an hereditary farmer, and as Government had not interfered, had levied the assessment unfettered except by the resistance of the peasants and their respect for usage. In *khoti* villages rice and garden lands were generally divided into separate occupancies and managed by the holders independent of the *khot*. In all cases the rent, not the land, was the *khot's* hereditary property. In mortgage deeds executed by the *khot* the mortgage referred to the rents and profits of the village, never to the ownership of a definite plot of land. When a *khot* mortgaged special pieces of land it was as his private property, not as part of the hereditary *khotship*.

Under these circumstances, Captain Wingate proposed²; (1), to improve the position of the holders of rice and garden lands by making them occupants under a fixed tenure instead of being at any time liable to an enhanced demand; (2), to grant parts of the uplands, *varkas*, as private property; and (3), to define the under-holders' liabilities, appoint village accountants, and abolish labour and other cesses. To some extent this would lessen the *khot's* power and privileges. Still as occupants they would, under a better tenure than before, continue to hold most of the best lands. The rights they would lose in lands not in their occupation were in most cases of little value. To make up for the loss of those rights and for the loss of the labour-levy and other of their customary perquisites, in addition to any lowering of the Government demand, ten per cent of the new rental should be handed over to the *khot*.

In forwarding Captain Wingate's letter, the Collector Mr. Coles (25th November 1852) stated that in his opinion the hereditary *khotship* was restricted to the revenue of the village lands and conferred no proprietary right. He approved of the proposal to declare the holders of rice and garden lands occupants, but thought that only holders of some standing and not outsiders should be so recognized. He approved of the compensation proposed by Captain Wingate and urged that an Act should be

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Experimental
Survey,
1851.

¹ Bom. Gov. Sel. CXXXIV. 52.

² Bom. Gov. Sel. CXXXIV. 52, 53.

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passed.¹ The Revenue Commissioner (29th December 1852), while admitting that originally the office of *khot* may have carried with it no proprietary claims, held that the lapse of time had served to create something more than the original farming and managing rights. He thought that before they pledged themselves to consider the *khot* as simply an hereditary farmer, Government should call on the *khots* to prove their claim to proprietary rights.² Government agreed in the view that the office of *khot* did not carry with it a right to the village lands not in the *khot's* occupancy. They thought that by confirming the *khots* in the occupancy of any lands to which they could prove their title, the Revenue Commissioner's view of the case would be sufficiently provided for. The under-holders, probably with more justice than the *khots*, claimed a right of property in the land. Any settlement must be a compromise, and the grant in their favour of an allowance of ten per cent of the village rental was a sufficient return for any of the *khot's* rights and usages that the settlement did not recognize.³ The chief object of the survey was, by an equitable settlement, by abolishing forced labour, and by protecting them from the exaction and oppressions of the *khots*, to place the people of Ratnágiri on an equality with the subjects of Government in other districts, and to recover a large body of the cultivating classes from a state of thralldom. Another object was to set apart a certain portion of the village area as forest reserves.⁴

Survey,
1853.

A beginning of the survey settlement was shortly after made. In 1853,⁵ the strength of the Ratnágiri survey party was raised from two assistants and a sub-assistant to a Superintendent, four assistants, and two sub-assistants. The survey was begun in the villages near Ratnágiri. The boundaries of the villages were fixed by a careful survey made by the theodolite. Rice, garden lands, and uplands level enough for the plough were measured into sections or survey numbers. The rest of the village land, the rough plots sometimes tilled by the hand, were left unsurveyed. Within the survey numbers the different holdings were separately measured and classed, and the trees in garden land were counted. The measurements were made under the Southern Marátha Survey rules, but to meet the peculiarities of rice, garden, and dry crop tillage, the classification rules were modified. The villages of the Ratnágiri and Sangameshvar sub-divisions, and of the petty divisions of Saitavda and Lánja were measured and classed. No attempt was at first made to introduce new rates. In 1855, Mr. Kemball made an experimental settlement in the three Ratnágiri villages of Kolamba, Bág-ágasha

¹ Bom. Gov. Sel. CXXXIV. 54.

² Bom. Gov. Sel. CXXXIV. 54.

³ Bom. Gov. Sel. CXXXIV. 55.

⁴ Gov. Res. 1937, 31st May 1853, quoted in Bom. Rev. Rec. 20 of 1856, part 4, 1295-1296.

⁵ These details of survey operations have been furnished by Mr. J. R. Gibson, Depy. Supt. Ratnágiri Revenue Survey.

and Tika, at that time, from the resignation of their *khots*, under Government management. In 1856 Lieut., now General, Waddington, Acting Superintendent of Survey, submitted proposals for introducing rates into eight other villages. These proposals were not sanctioned. The rates had been introduced quietly enough into two of the three villages first settled. In the third, a rented, *khoti*, village, the settlement caused great trouble.

The survey officers felt that the new settlement could not be successfully introduced without legislation, and the new Collector Mr. Turquand (19th February 1856) urged that *khots* who had reclaimed villages should receive special compensation for the transfer of their limited proprietary rights to the under-holders. The Revenue Commissioner Mr. Reeves, on the other hand, held that as the *khots* had for many years managed their villages only under a yearly agreement, and as Government and not the *khots* had the power of granting leases of waste village land, the right of the *khot* in land not in his own occupancy went no further than the right to manage it. At the same time the *khots* were entitled to very great consideration. They should be allowed to enjoy as much of their past privileges as was consistent with the interests of the rest of the people and of Government. He suggested that except lands appropriated by purchase, lease, or other satisfactory mode, the *khot* should be registered as the superior holder of all Government land in actual cultivation; and that he should engage for the whole assessment of the uplands, *varkas*, which, where practicable, should be surveyed, assessed, and settled in holdings of fifty acres.¹ On these and other papers Government (23rd April 1857) decided that until the rights and privileges of the *khots* were more fully investigated, the attempt to introduce the new settlement should cease. The settlement of the three villages was annulled, and survey operations suspended.²

A detailed report on the condition of the district in 1856 would seem to show that it had changed little since Captain Wingate's report five years before. The population, returned at 681,147 souls, was more than the district could support. Even the poorest hill-side and hill-top soils were under tillage, and bare rocks were covered with earth brought from a distance.³ Besides the labourers who sought work yearly in Bombay there were 2791 emigrants, 1368 of them to other districts and 1123 to foreign parts. Government had, in 1852,⁴ proposed that the excess population should be drafted to Khándesh. The proposal was published throughout the district, money advances for cattle and field tools were offered, and those who were willing to go were asked to send in their names. Up to 1856 not a name had been received. The high paid labour on the railways then making in the north Konkan, and the demand for workmen in the Bombay dockyard and other establishments, combined with the love of home kept people from leaving Ratnágiri.⁵

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Survey Stopped,
1856.

State of the
District,
1856.

¹ Bom. Gov. Sel. CXXXIV. 66.

² Mr. Gibson.

³ Collector, 614, 22nd July 1856; Bom. Rev. Rec. 20 of 1856, part 4, 1264.

⁴ Letter 5681, 27th August 1852, in Bom. Rev. Rec. 20 of 1856, part 4, 1288.

⁵ Bom. Rev. Rec. 20 of 1856, part 4, 1286-1289.

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General Francis'
Survey,
1859.

Two years later a second attempt was made to introduce the survey into Ratnágiri. Captain, now General, Francis to whom this duty was entrusted, reported (23rd September 1859) on the *khoti* tenure, noticing the points which seemed to him to have stood in the way of the successful working of Captain Wingate's scheme. In Captain Francis' opinion the *khots* would not be brought to agree that all lands not in their possession should be entered in the cultivator's name. If they did agree they would probably soon be able to get the whole body of the people back into their power. The *khot* was generally the moneylender as well as the village manager. He supplied the people with seed grain and in some cases even with plough cattle. The land would soon pass into the *khot's* hands not as the superior holder, but as the occupier. Then the people would be in a worse position than ever. Captain Francis was convinced that the only practicable form of settlement must be based on an agreement with the *khot* as superior holder. His proposal was to settle with the *khot* for the revenues of the village in the gross, and to protect the under-holders who, he showed, were in much need of help,¹ by giving them a right of occupancy, by taking from the *khot* the power of ousting his tenants except by order obtained on petition to the Collector, and by making it compulsory on the *khot* to grant the tenant a receipt. All holders of land, except tenants in the *khots'* or in peasant proprietors' lands, were to get occupancy rights. They were to pay the *khot* not at the survey rates but on terms agreed upon with the *khot*. There would thus be three forms of tenure: 1, peasant holders, *dhárekáris*, independent of the *khot*, but paying the Government assessment through him; 2, occupancy tenants holding on terms agreed with the *khot* not liable to be ousted, and except under special circumstances not liable to a rise in rent²; 3, tenants-at-will entirely dependent on the superior holder, *khot*, or peasant holder, *dhárekári*, both for the possession of the land and for the terms of the rent. One important principle of the settlement was to remove the jurisdiction in rent and land suits between the *khot* and his tenants from the civil court to the Collector. Afterwards it was arranged that, as superior holders, the *khots* should take their villages on thirty years' leases, giving to all occupiers, except tenants in *khoti* holdings, a thirty years' lease of the land at rates not more than one-half in excess of the survey assessment.³

Government, in approving Captain Francis' proposals, said that in attempting to reform the present system it was their object, as far as justice and sound management allowed, to adopt rather than

¹ Captain Francis strongly represented the sufferings of the cultivators at the hands of the *khots*. The *khots* had lately been ejecting all their tenants that no occupation record might appear in the survey papers. This was in central Konkan. In Ratnágiri Mr. Crawford (1860), then Second Asst. Col., complained of the same behaviour on the part of the *khots*. Bom. Gov. Sel. CXXXIV. 70.

² The special circumstances were, (a) when the rent was below that paid in other corresponding lands; (b) when its value had risen not through any work of the tenants; (c) when the tenant held more land than he paid for. Bom. Gov. Sel. CXXXIV. 72.

³ Bom. Gov. Sel. CXXXIV. 73.

overthrow institutions firmly rooted in the district. Three points seemed established; that Government had the right to revise and alter the rent paid by the *khot*; that the *khot* had the right to settle with Government for the whole village; and that the under-holder had a right to protection against the *khot's* over-exactions. The former settlement had stirred up the ill will of the *khots* by settling with the under-holders direct, treating the *khot* merely as an agent. The system now proposed was to settle with the *khot* modifying the present practice only so far as change was urgently called for. The *khot* was to get a lease of the village at survey rates for thirty years. In turn he was to give a thirty years' lease to all permanent occupants. The under-holder's right was to be hereditary, and under certain restrictions transferable.¹ Captain Francis prepared a draft Act embodying the provisions of the proposed settlement. Government were of opinion that the new settlement could be introduced under the Act (Reg. XVII. of 1827) then in force. The *khot* had the hereditary right to manage the lands of his village, and was therefore the occupant of the village with whom Government made the settlement. That Government had the power to make changes in the terms under which the *khot* was allowed to collect the revenues,² was shown by his passing a yearly agreement for the management of his village. Under these circumstances the survey settlement was ordered to be begun in Ratnágiri. Before the survey of any part of Ratnágiri was completed, the provisions of the special settlement provided for *khoti* villages were embodied in the Bombay Survey Settlement Act (I. of 1865).³

In introducing this second survey⁴ the system of measuring formerly adopted by Mr. Kemball was not changed. New rules for classifying rice, garden, and hill soils were introduced. The hill lands were now divided into survey numbers and a rough survey was made of the holdings in each number. The work was begun in Bántot. The *khots* were as much opposed to the survey as ever and kept back the work in every possible way, refusing to give the boundaries of the holdings or the names of the occupants. Still

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¹ Land held by a tenant-at-will was not transferable without the *khot's* consent. Land held by an occupancy tenant was transferable on paying the *khot* a fine, *nazrana*. If the occupancy holder had made improvements he should gain the advantage of them, and if the *khot* had made improvements he should have the power to refuse to allow the transfer. Bom. Gov. Sel. CXXXIV. 75.

² As to the extent to which Government might exercise this power Mr. Chaplin (1821) said Government can unquestionably raise the rent, and perhaps to such a pitch as to absorb all profits and render the farm not worth having. Bom. Gov. Sel. CXXXIV. 83.

³ The sections embodying these provisions were Nos. 37 and 38. Section 37 declared that on introducing the survey settlement into villages held by *khots*, it should be competent for the Superintendent of Survey to grant the *khot* a lease for the full period guaranteed by the settlement. Section 38 declared that the Superintendent of Survey might, at the time of a general survey, fix the demands of the *khot* on the tenants. But the limitation of demand should not confer on the tenant any right of transfer that did not before exist.

⁴ The details of this second survey (1865-1876) have been furnished by Mr. Gibson of the Ratnágiri Revenue Survey. The sub-divisions surveyed were, Bántot in 1865-66, Khed in 1866-67, Sartavda petty division of Ratnágiri in 1866-67. Dupoli in 1867-68, Ratnágiri in 1868-69, and Chiplun in 1870-72; Vengurla was afterwards (1875-76) surveyed.

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the work was pressed on. The survey of Bānkot was completed in 1865, and a thirty years' settlement introduced in 1866. The result was, on a total of £3570 4s. (Rs. 35,702), an increase of £350 10s. (Rs. 3505) in the Government demand. The details were :

Bānkot Survey and Settlement, 1866.

NAME.	ACREAGE			RENTAL		INCREASE.
	Unarable	Arable.	Total.	Former.	Present.	
Bānkot ...	19,503	63,315	82,820	Rs. 32,197	Rs. 35,702	Rs. 3,505

The average acre rates showed a fall in rice lands from 9s. 6d. to 8s. 6d. (Rs. 4 as. 12 - Rs. 4 as. 4), in gardens from £1 7s. 10½d. to 19s. 10½d. (Rs. 13 as. 15 - Rs. 9 as. 15), and in uplands, *varkas*, from 7½d. to 5¾d. (as. 5 - as. 3 p. 7). Meanwhile (Novr. 1863), shortly after the survey was begun, Captain Francis was appointed Survey Commissioner of the Northern Division, and the Ratnágiri Survey was supervised by Major, now General, Waddington. Under his supervision the survey of the Khed sub-division was completed in 1866 and a thirty years' settlement introduced in 1867. The result was, on a total of £10,763 (Rs. 1,07,630), an increase of £3446 10s. (Rs. 34,465) in the Government demand. The details were :

Khed Survey and Settlement, 1867.

NAME.	ACREAGE.			RENTAL.		INCREASE
	Unarable	Arable.	Total.	Former.	Present.	
Khed ...	53,494	182,833	236,327	Rs. 73,165	Rs. 1,07,630	Rs. 34,465

The average acre rates showed a rise in rice lands from 3s. 6d. to 6s. 4½d. (Rs. 1 as. 12 - Rs. 3 as. 3), in garden lands there was formerly no rate, and the present survey settlement rate was fixed at 12s. (Rs. 6), and in uplands, *varkas*, there was a fall from 6d. to 5¼d. (as. 4 - as. 3 p. 6).

The next settlement was of the Saitavda petty division of Ratnágiri. In the new settlement the areas of rice and garden lands measured by Mr. Kemball in 1855-56 were used. In 1864-65, an establishment was sent to class the soils and record all boundary changes since Mr. Kemball's survey. The work was finished in 1866 and a thirty years' settlement introduced in 1867. The results showed, on a total of £3315 10s. (Rs. 33,155), an increase of £209 (Rs. 2090) in the Government demand. The details were :

Saitavda Survey and Settlement, 1867.

NAME.	ACREAGE.			RENTAL.		INCREASE.
	Unarable.	Arable.	Total.	Former.	Present.	
<i>Peta Saitavda</i>	29,093	54,093	83,191	Rs. 31,065	Rs. 33,155	Rs. 2090

The average acre rates showed a rise in rice lands from 8s. 7½d. to 9s. ¾d. (Rs. 4 as. 5 - Rs. 4 as. 8 p. 6), a fall in garden lands from 10s. 3d. to 8s. 6d. (Rs. 5 as. 2 - Rs. 4 as. 4), and in uplands, *varkas*, from 2s. 3d. to 6d. (Re. 1 as. 2 - annas 4).

In 1867, the survey of the Dápoli sub-division was finished, and a temporarily sanctioned settlement introduced in the following year. The results showed, on a total of £11,071 (Rs. 1,10,710), an increase of £100 12s. (Rs. 4006) in the Government demand. The details were :

Dápoli Survey and Settlement, 1868.

NAME.	ACREAGE.			RENTAL.		INCREASE
	Unarable.	Arable.	Total.	Former.	Present.	
Dápoli ..	67,663	182,169	249,832	Rs. 1,06,704	Rs. 1,10,710	Rs. 4006

The average acre rates showed in rice lands a fall from 9s. 3d. to 7s. 9d. (Rs. 4 as. 10 - Rs. 3 as. 14), in garden lands a rise from 12s. 3d. to 15s. 6d. (Rs. 6 as. 2 - Rs. 7 as. 12), and in uplands, *varkas*, a fall from 6d. to 4½d. (as. 4 - as. 3).

For the Ratnāgiri sub-division Mr. Kemball's measurements were made use of, the boundaries of holdings were revised, and all the land classified. The work was finished at the end of 1868, and a temporarily sanctioned settlement was introduced in April and May 1869. The result showed, on a total of £5842 10s. (Rs. 58,425), a fall in the Government demand of £2120 12s. (Rs. 21,206). The details were :

Ratnāgiri Survey and Settlement, 1869.

NAME	ACREAGE.			RENTAL.		DECREASE.
	Unarable.	Arable.	Total.	Former.	Present.	
Ratnagiri	62,002	97,921	159,923	Rs. 79,631	Rs. 58,425	Rs. 21,206

The average acre rate in rice lands was the same, 7s. 4½d. (Rs. 3 as. 11), in garden lands there was a rise from 1s. 1½d. to 6s. 11¼d. (annas 9 - Rs. 3 as. 7 p. 6), and in uplands a fall from 6d. to 4½d. (as. 4 - as. 3).

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*Survey,
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In 1870 the survey of Chiplun was finished, and the settlement introduced in 1871-72. In this survey the uplands, *varkas*, instead of being roughly measured, had each holding carefully surveyed and classified. The result of the temporarily sanctioned settlement was, on a total of £10,081 16s. (Rs. 1,00,818), a rise of £131 18s. (Rs. 1319) in the Government demand. The details were:

Chiplun Survey and Settlement, 1871.

NAME.	ACREAGE			RENTAL.		INCREASE.
	Unarable.	Arable.	Total.	Former.	Present.	
Chiplun, including Guhāgur...	100,192	212,554	312,636	Rs. 99,499	Rs. 1,00,818	Rs. 1319

The average acre rates showed a rise in rice lands from 6s. 4½d. to 6s. 10½d. (Rs. 3 as. 3 - Rs. 3 as. 7), and in garden lands from 1s. 1½d. to 6s. 11¼d. (*annas*. 9 - Rs. 3 as. 7 p. 6), and a fall in uplands, *varkas*, from 6d. to 5¼d. (*as*. 4 - *as*. 3 p. 6).

All this had been carried on in the face of much opposition. In 1873, matters had come to such a pass that the *khots*, objecting to have their demands on their tenants limited or to let the tenants' names be entered in the records,¹ refused to manage their villages, and filed suits against the Collector and survey officers for loss caused by the survey. Not only by the *khots* was the settlement disliked. The regular cash payments were new to the under-holders, and though less in amount, were perhaps more irksome than the former way of realising the *khot's* demands.² The division of the uplands, *varkas*, and wrong entries of peasant-held, *dhāra*, land, as rented, *khoti*, caused much confusion. In April 1873, Mr. Havelock the Revenue Commissioner reported extreme discontent and alarm among all classes. Peasant holders as well as *khots* were hostile to the new settlement, and even tenants-at-will, though pleased at gaining an entry in the survey records, were universally opposed to the payment of *khoti* profit. The system had absolutely no friends. Mr. Havelock recommended a return to grain rentals and yearly commutations.³

Khot Commission,
 1874.

In consequence of this failure, Government, in 1874, appointed⁴ a commission to ascertain, by actual experiment in the field, the mode of settlement most likely to meet the views of the different parties. In their instructions to the Commission, Government decided that both the rice lands and the uplands in the hands of peasant holders, *dhārekaris*, and reduced peasant holders, *daspathkaris*, *dupathkaris*,

¹ Captain Francis, Bom. Gov. Sel. CXXXIV. 101.

² Mr. Nairne, Bom. Gov. Sel. CXXXIV. 103.

³ Bom. Gov. Sel. CXXXIV. 109.

⁴ Gov. Res. 4983, 16th Sept. 1874. The Commission consisted of Colonel Francis, president, Mr. A. K. Nairne, C. S., Mr. Narayan Ganesh Sathe, and Mr. Naro Babit Gole, members, the last named gentleman representing the *khots*.

and *pínchpathkaris*, should be surveyed and assessed. Government gave up the attempt to fix the precise amount that other tenants should pay the *khot*. Government interference must be limited to protecting them against being ousted or having their rents arbitrarily raised. To ensure this measure of protection their customary rents were to be recorded, the areas of rice fields and uplands fixed, and the rule laid down that so long as they paid they could not be ousted. The Commission were to settle to whom occupancy rights should be granted, and if granted, how far they should be transferable. As far as possible the particular plot of upland held by each tenant should be marked, and ground set apart for village grazing. The *khot* was to have the power to manage all lands except those in the hands of peasant holders and occupancy tenants, to dispose of lapsed land, and if he pleased, to give occupancy rights to his yearly tenants. In return for managing the village the *khot* was to receive a percentage payment. He was not to be reckoned a Government servant.

On¹ the report of the Commission, Government decided² that the differences of opinion were irreconcilable, and that no settlement could be devised which could command the general assent of both parties, *khots* and cultivators holding under them. It was decided to abandon as impracticable all attempts to arrive at a settlement by mutual consent. Government were, however, at last in possession of sufficient information on all points to enable them to lay down the principles which they finally adopted, principles which not being opposed to any existing law, Government were prepared to give better effect to by legislation, should this course seem necessary. Government held that the claims of the *khots* were in some respects, especially in regard to proprietary rights, entirely untenable. At the same time, they were of opinion that 'the method in which the former settlement³ had been carried out, if not the principles therein adopted, had in some respects injuriously affected the legitimate interests of the *khots*. On the other hand, Government, while endeavouring to strengthen the title and position of the *khot*, as of other landholders, had never intended to do so at the expense of existing private rights subordinate to his.' Government held that the entire *khoti* question had been somewhat complicated by a confusion between the phrases 'survey occupant' and 'occupancy tenant,' and that the only person who could be considered to have the 'right of occupancy' under the Survey Act in a *khoti* estate was the *khot* himself. His tenants might or might not be 'occupancy tenants' in the sense in which that phrase is used in India, that is have the right of occupying their land under him so long as they pay a certain fixed or customary rent. The survey officers, however, were apparently under the impression that the persons whose names they recorded as 'occupancy or permanent tenants' of *khoti* lands, thereby became

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Government Decision,
1876.

¹ This and the account of the final settlement have been contributed by Mr. A. T. Crawford, C. S.

² Gov. Res. 2474, 24th April 1876.

³ The settlement laid down in Gov. Res. 1832 of 1860.

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'survey occupants,' and to this the *khots* naturally and rightly objected. Government next proceeded to recount the arguments in favour of the *khot* paying somewhat less to Government than the full survey assessment of all assessable lands in his village, namely, that the expenses of village management are borne by the *khot*, and that he has to bear any loss on account of assessed lands lying waste, or of failure or delay to pay their rent by the cultivators. Government next dealt with the questions arising from the relations of the *khots* with the different classes of cultivators holding under them. It was decided that all tenants, whatever their status, who were shewn to have rights of occupancy against the *khot*, must be entered in the village register of lands, with full particulars of the incidents of their tenure and of their rent. At the same time, such tenants were not to be recorded as 'survey occupants' holding from Government, but as tenants holding on certain terms from the *khots*. It was decided that the administration papers of the village should contain a stipulation in legal form binding the *khot* to observe the rights thus recorded, and declaring that his tenure of the estate depended upon his observance of them. Government then proceeded to enumerate the several classes of privileged tenants, *dhárekáris*, *daspatháris*, *dupatháris*, and the like, whose tenures have been above described. Last of all, they considered the status of the customary holders of *khoti* land, regarding whose position the greatest difference of opinion existed, the *khots* contending that they were mere tenants-at-will without hereditary rights of occupancy, much more without transferable rights, liable to be ejected or to have their rents raised at the pleasure of the *khots*. Government were satisfied that all old tenants of *khoti* lands possessed customary rights of occupancy, that is of holding their lands hereditarily so long as they paid the customary rents of the village, originally not higher than half the produce of rice and one-third the produce of hill crops, *varkas*, and that so far from the tenants having encroached on the rights of the *khots*, the *khots* had gradually encroached on the rights of the tenants, especially by the imposition of extra cesses. It was therefore declared that all extra cesses should cease, that the customary rents of *khoti* land might as heretofore be taken in kind, as this was better suited to a poor improvident hand-to-mouth peasantry, but that in no case should the rents exceed the proportions mentioned above. Existing agreements between *khots* and tenants, where found, were to be respected and enforced. Customary tenants were to have hereditary rights, but no right of transfer except in special cases, in which on inquiry the right should be found to exist. All old tenants who, themselves or by their predecessors in inheritance, had permanently resided as cultivators in the village twenty years prior to the passing of the Bombay Survey Act (I. of 1865), were to be recorded as occupancy tenants paying customary rents, fallow years in the case of uplands, *varkas*, being counted in the twenty years. All tenants of the *khots'* home farms, *khoti khásqi*, were to be regarded as tenants-at-will, and not registered. The *khot* was to be entitled to assistance, free of payment, in recovering from defaulters the rents recorded as due by them. To give effect

to these provisions it was decided that the hill lands in the older surveyed sub-divisions, which had been only roughly measured off, should be remeasured and classified in detail. A settlement in accordance with these provisions could proceed at once in those sub-divisions only in which the former settlement had not been guaranteed. In sub-divisions where a guarantee had been given, the adoption of the new settlement must be with the consent of the cultivators. But Government held that it should be the aim of the settlement officer, as far as possible, to induce both parties, the *khots* and the tenants, to agree to substitute the new for the old settlement in sub-divisions already settled with a guarantee. The following subsidiary points were also decided : that it was unnecessary to set apart grazing lands ; that Government should concede to the *khots* the much-coveted right of converting *khoti* land into *dhára* ; that the *khots* were to keep accounts of a simple character, but in a prescribed form ; that if a *khoti* village remained under Government management for twelve years and no petition for taking it back was presented within that time, the right of re-entry was to be for ever barred ; that the managing *khots* should be nominated in accordance with lists decided on by the coparcenary, or in the event of dispute by the Collector ; that Government should concede to the *khots* the refusal of the right to reclaim the salt swamps, *khújans* ; that occupancy rights were to be settled once for all, and were not to accrue in future.

This Resolution passed, Government transferred it to the Legal Remembrancer that a Bill embodying its provisions might be drafted for the Legislative Council, and Mr. Arthur Crawford, who had been for several years an Assistant Collector and Senior Assistant Judge in the Ratnágiri district, was transferred to Ratnágiri as Collector to carry out the new settlement. A long discussion then ensued as to the subordinate agency to be employed under Mr. Crawford, and as to the necessity for passing an act at once to legalise the proposed settlement, Mr. Crawford contending that it would be better to wait for two or three years until experience had been gained of the working of the new settlement. Sir Richard Temple took up the question immediately on assuming the Governorship of Bombay, in May 1877. On the 12th June,¹ Mr. Crawford received definite instructions to proceed at once with the settlement on the principles above laid down, which were modified only to the extent of a direction that the record of tenant right should include a list of tenants-at-will. At the same time, Government expressed a hope that it might be possible, as suggested by Mr. Naylor the Legal Remembrancer, that the cumbrous practice of calling on managing *khots* to pass yearly agreements should be abolished in favour of some simpler system.

Mr. Crawford, who was shortly after appointed *ex-officio* Settlement Officer with a special assistant in addition to his covenanted assistant collectors, carried out the settlement in the following manner. The survey officers were first deputed to remeasure and reclassify

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*Government
Decision,
1876.**Final Settlement,
1877-1879.*

¹ Gov. Res. 3662, 12th June 1877.

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the hill lands wherever, in the previous survey, this work had been roughly performed. The assistant collectors were told off to groups of villages in which the survey settlement had been temporarily introduced without a guarantee, and were required to hold a review, *rūzurāt*, of the *khots* and villagers in each village, if possible at or near the village temple. No law agents, *mukhtyārs*, were allowed to speak, both *khots* and villagers being well able to represent their own case. The following points were to be specially attended to: Was the tenure of the village, pure *khoti*, mixed *khichadi*, or *dhārekari*? If *khoti* or mixed, *khichadi*, had the *khots* a title deed, *sauād*? If so, a copy was to be recorded. A list of *khot* sharers, showing the interest of each co-sharer and the rotation of management, was to be made out and signed by all present. A memorandum, declaring the customary rates of rent for each kind of crop, was to be made out, and signed by the *khots* present, and by the chief or spokesmen villagers. The village-land register, *botkhat*, was to be taken by the assistant collector, and each man was to be called in succession before the assembled villagers, his holding read out to him, and his claim as a *dhārekari*, a privileged, or a customary tenant, in respect of each piece of ground, was to be recorded. The *khot's* reply to such claim was to be recorded. In every possible case, evidence was to be taken, and a decision passed and recorded on the spot. Inquiry was to be made if there was any other dispute between *khot* and tenant, or between tenant and tenant, and disputes were to be summarily settled then and there. Every possible effort was to be made to reconcile *khots* with tenants and tenants with each other. *Khots* were to be urged to permit good tenants of long standing to be recorded as customary tenants rather than as tenants-at-will, notwithstanding that their tenancy might not have lasted for twenty years prior to Act I. of 1865.

In this manner, in the year 1877-78,¹ the status of 26,179 *khoti* tenants in 210 villages was finally settled: numerous disputes of long standing, not only between *khots* and villagers, but between villager and villager and *khots* and *khot*-sharers, were carefully inquired into and summarily decided in the face of the assembled villagers. The five survey establishments completed the resurvey of the hill lands in 127 villages, and were far advanced in 120 more. The delay in beginning the work prevented the introduction of the new settlement with crop appraisement and grain rentals into more than forty-seven villages. In the season ending 30th June 1879, the status of 20,845 *rayats* in 167 villages was settled, eighty-seven villages were completely resurveyed and seventeen were far advanced. In the season now ended, 10,761 tenants were reviewed in 105 villages, and about eighty villages have been resurveyed.

No steps were taken, in the season of 1877-78, to secure the consent of the tenants in guaranteed villages to the substitution of the new settlement in place of the old. It was thought better that they should have time to learn from their neighbours in unguaranteed

¹ Gov. Res. 5580, 31st October 1878.

villages what the new settlement was, and what were its benefits to *khoti* tenants. The people of four such guaranteed villages, of their own accord, petitioned for the new settlement. In the season of 1878-79, the guaranteed villages were thought generally to be well disposed towards the new settlement, and the *khoti* tenants were thereupon canvassed, when, in 184 out of 186 guaranteed villages, all the *khoti* tenants to the number of 12,565 separately recorded a petition asking for the new settlement. In two villages only do (1880) the tenants still hold aloof, but there is little doubt they too will soon follow their neighbours.

The new settlement in its entirety, with a crop appraisement and grain rentals, is now in force in every village hitherto surveyed, except the two guaranteed villages above mentioned, that is to say in 742 villages or more than half the gross number of *khoti* villages in the district. The small amount of friction may be judged from the fact that out of 81,753 *khoti* tenants, it has been necessary, in the past season, to adopt coercive measures only against 548 tenants scattered among 175 out of the 742 villages. In a large majority of *khoti* villages, perfect harmony has been restored between the *khot* and his tenant, while the precautions adopted in the crop appraisement rules have been found sufficient and effectual to protect the tenant from over-exactions by the *khot*. Only about five per cent of the tenants remain recorded as tenants-at-will, the *khots* having been found very liberal in consenting to register good tenants-at-will as customary tenants.

The Khot Act (I. of 1880) legalises all that has been effected as above related, and prescribes the same procedure for the future.

When,¹ in 1874, settlement work in *khoti* villages was brought to an end, survey operations were transferred to the peasant-held villages of the south of the district. In 1875 the survey of Vengurla was finished, and as all the villages were managed by Government, *khálsa*, a thirty years' settlement was introduced in 1876. The result was, on a total rental of £3844 18s. (Rs. 38,449), an increase in the Government demand of £107 8s. (Rs. 1074). The details were:

Vengurla Survey and Settlement, 1876.

NAME.	ACREAGE.			RENTAL.		INCREASE.
	Unarable.	Arable.	Total.	Former.	Present.	
Vengurla..	14,033	28,120	42,153	Rs. 37,375	Rs 38,449	Rs. 1074

The average acre rates showed in rice lands a fall from 5s. 10½d. to 5s. 9d. (Rs. 2 as. 15 - Rs. 2 as. 14), in garden lands from 16s. to 14s. 9d. (Rs. 8 - Rs. 7 as. 6), and the levy on uplands of a cess of 3¼d. (as. 2 p. 6).

In accordance with the changes sanctioned by Government in the settlement of the rights of the *khots* and under-holders, the uplands

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*Final Settlement,
1877-1879.*

*Survey,
1876.*

¹ Contributed by Mr. Gibson of the Ratnágiri Revenue Survey.

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*Survey Results,
1855-1878.*

in surveyed sub-divisions were remeasured and a settlement introduced by the Collector on the terms laid down by Government. Since November 1877, survey work has been confined to remeasuring uplands and preparing records of the new settlement made by the Collector.

The following statement shows, in the twenty-three years ending 1877-78, a spread in the occupied area from 389,973 to 1,004,529 acres; in the revenue due to Government a rise from £70,683 (Rs. 7,06,830) to £92,901 (Rs. 9,29,010); and in the outstandings a fall from £4938 (Rs. 49,380) in 1856 to £1622 (Rs. 16,220) in 1878. The spread in the area under tillage is probably almost entirely due to the introduction of correct measurements. The survey of each section of the district showed that while since the last survey the nominal area had remained unchanged, the actual tillage had greatly spread. The area of arable unoccupied land disclosed by the survey rose from 327 acres in 1868 to 3640 in 1872. It has again fallen to 569 in 1878. The total of occupied acres fell from 389,973 in 1856 to 353,919 in 1860, and again rose steadily to 404,948 in 1866. From this the work of remeasurement in different parts of the district quickly brought up the whole area to about 650,000 in 1869, 850,000 in 1873, and 1,000,000 in 1876. Outstanding balances, in 1856 as high as £4938 (Rs. 49,380), rose in the next three years to £5893 (Rs. 58,930). They then suddenly fell to £194 (Rs. 1940) in 1860 and continued under £1000 (Rs. 10,000) until the introduction of the new survey in 1867. Since then, after rising to £3144 (Rs. 31,440) in 1872, they fell to £591 (Rs. 5910) in 1876, and again rose to £1703 (Rs. 17,030) in 1877, and £1622 (Rs. 16,220) in 1878.

Ratnágiri Occupied Area, Assessment, and Outstanding Balances, 1855-1878.

YEAR.	OCCUPIED RENT-PAYING LAND.						UNOCCUPIED ASSESSED LAND.		
	a. Acres.	Full assess- ment.	Remission.			Balance for collection.	a. Acres.	Full assess- ment	Realiza- tion from auction sale of grazing.
			Per- ma- nent	Casual.	Total				
1	2	3	4	5	6	7	8	9	10
		Rs.	Rs.	Rs.	Rs.	Rs.		Rs.	Rs.
1855-56	389,973	7,07,479	...	647	647	7,06,832	...	...	2444
1856-57	372,934	7,21,329	...	579	579	7,20,749	...	...	3061
1857-58	368,287	7,61,117	...	628	628	7,60,491	...	...	1752
1858-59	366,245	8,00,150	...	792	792	7,99,358	...	...	1820
1859-60	353,919	8,94,222	...	1607	1607	8,92,615	...	...	10,967
1860-61	362,408	7,92,345	...	1606	1606	7,90,739	...	...	5865
1861-62	367,392	8,24,171	...	1590	1590	8,22,581	...	...	6679
1862-63	370,565	8,51,223	...	1753	1753	8,49,475	...	...	5557
1863-64	361,677	10,44,225	...	1580	1580	10,42,645	...	...	5924
1864-65	364,193	10,91,004	...	1200	1200	10,89,804	...	...	5633
1865-66	404,948	10,01,168	...	4208	4208	9,96,960	...	...	5671
1866-67	419,622	10,31,661	...	1725	1725	10,29,936	...	...	4467
1867-68	662,834	8,09,501	...	1568	1568	8,07,933	327	153	4495
1868-69	637,791	8,42,386	...	1530	1530	8,40,856	173	437	3490
1869-70	729,312	8,50,557	...	3091	3091	8,47,466	370	1045	8660
1870-71	845,253	8,22,172	...	11,365	11,365	8,10,807	422	1060	11,171
1871-72	846,950	8,41,796	...	1231	1231	8,40,565	3640	1535	12,346
1872-73	849,512	8,29,920	...	571	571	8,29,349	3398	1489	10,601
1873-74	960,823	8,59,815	...	743	743	8,59,072	3361	1681	12,256
1874-75	995,622	8,62,561	...	989	989	8,61,572	3366	1766	11,696
1875-76	1,001,072	8,74,130	...	7685	7,685	8,66,445	818	1902	6695
1876-77	1,003,421	9,00,106	...	119	1,129	8,98,977	954	2151	30,884
1877-78	1,004,529	9,29,738	...	732	732	9,29,006	569	2094	2823

Ratnágiri Occupied Area, Assessment, and Outstanding Balances, 1855-1878—continued.

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*Survey Results,
1855-1878.*

YEAR	ALIENATED LAND.			TOTAL LAND.			OUT- STAND- ING BALAN- CES.	REMARKS.
	a.	Full	Quit-	Acres.	Assess- ment.	Collec- tions.		
	Acres.	stan- dard assess- ment.	rent.					
1	11	12	13	14	15	16	17	18
		Rs.	Rs		Rs.	Rs.	Rs.	
1855-56..	...	85,205	3737	389,973	7,92,684	7,13,013	49,377	
1856-57..	...	84,910	3737	372,934	8,06,239	7,27,547	49,650	
1857-58..	...	85,335	3739	368,287	8,46,452	7,65,982	54,266	
1858-59..	...	85,342	3739	366,835	8,35,492	8,04,917	58,932	
1859-60..	...	84,655	3739	353,919	8,73,877	9,07,321	1940	
1860-61..	...	84,465	3739	362,408	8,76,710	8,00,243	1825	
1861-62..	...	84,487	3739	367,392	9,08,658	8,32,999	4295	
1862-63..	...	84,696	3742	370,365	9,35,925	8,58,774	4169	
1863-64..	...	85,058	c 8780	364,677	11,29,283	10,57,349	5962	
1864-65..	...	86,896	11,004	364,193	11,77,700	11,09,441	9921	
1865-66..	...	87,376	11,094	404,948	10,88,524	10,13,725	2621	
1866-67..	...	89,071	11,530	419,622	11,20,732	10,45,993	8073	Survey and settlement in- troduced in 77 villages of Bánkot.
1867-68..	2751	85,243	10,155	665,912	8,94,897	8,22,583	23,324	Ditto ditto in 49 villages of Saltavda and 142 of Khed.
1868-69..	3856	85,099	10,595	661,730	9,27,923	8,54,931	14,230	Ditto ditto in 177 villages of Dapoli.
1869-70..	5449	81,975	12,673	735,131	9,33,577	8,68,799	17,173	Ditto ditto in 95 villages of Ratnágiri.
1870-71..	6567	83,396	13,377	852,242	9,06,623	8,35,355	14,029	Ditto ditto in 69 villages of Chiplun.
1871 72..	6618	83,305	13,080	857,208	9,26,436	8,65,791	31,443	Ditto ditto in 35 villages of Chiplun and 31 of Guhágar.
1872-73..	4600	83,655	13,277	857,510	9,06,064	8,44,227	23,054	Ditto ditto in 73 villages of Guhagar.
1873-74..	6917	86,631	14,028	997,101	9,48,127	8,85,350	10,407	
1874-75..	6999	85,583	14,028	1,005,957	9,49,880	8,87,296	9773	
1875-76..	670,153	85,368	14,188	1,072,048	9,61,401	8,87,628	5012	Ditto ditto in 10 villages of Vengurla.
1876-77..	69,956	85,763	14,205	1,074,331	9,88,020	9,16,266	17,035	
1877-78..	69,967	81,971	14,178	1,075,065	10,16,713	9,46,007	16,219	

a. As the survey is not finished these figures are estimates from returns prepared in the Collec-
tor's office.

b. Villages, a share of whose revenue, not whose land, had been granted, were for the first time
shown as alienations.

c. Many quit-rents had formerly been shown under ordinary revenue.

In addition to the regular tenures mentioned above, three¹ special tenures have lately been brought to notice in the southern sub-divisions of Málvan and Vengurla. In the disturbed times antecedent to British rule, the Sárvants of Vádi had either retained certain valuable garden lands in their own possession, putting in crown lessees, or from time to time as lands of all kinds, mostly however inferior lands, were abandoned by the occupants, they were registered as crown lands; or again the holdings of persons inimical to the state were seized and taken in forfeit. The whole made a by no means inconsiderable area of crown lands to which the British Government succeeded. These have been dealt with in three different ways according to the circumstances of each case.

First there were the '*sheri thikáns*' or crown lands, properly so called. They consist of rice, garden, and hill lands, which, during the time of the former government, were partly assigned to

Special Tenures.

*Sheri
Thikans.*

¹ Contributed by Mr. A. T. Crawford, C.S.

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certain servants of the Vádi state, in lieu of their pay, and partly held by relatives of the chief. On the cession of the district in the year 1819, the British Government became the sole proprietors of these lands, and they were then farmed out for periods not exceeding ten years, the right of cultivating them being sold by public auction to the highest bidder.

This system continued to the year 1842, when the Collector of Ratnágiri reported that the shortness of the term of lease operated as a bar to their improvement, and that many of the lands were annually decreasing in value. In order to induce the lessees to lay out money on the improvement of the land, the Collector proposed to appoint a committee to classify the land and to determine the assessment to be paid in future, and then to let out the lands on a permanent settlement. The Collector's proposal to classify and assess was sanctioned.¹ But Government declined to make a permanent settlement, and directed that the leases should be given for thirty years, and that the persons then in occupation, especially those who had expended capital in improvements, should have the first refusal of the new leases. These orders were subsequently modified in many cases, the leases being declared terminable at the introduction of the revenue survey settlement. All leases granted for thirty years expired shortly before the late survey, but from year to year were continued to the existing lessees on the former terms until the new survey settlement should take effect. In each case there was a clause by which the lessee was bound at any time to give up to Government, without compensation, all lands required for forest purposes.

In the course of the late survey of the sub-divisions of Málvan and Vengurla, all lands, including these *sheri thikáns* or crown lands, were remeasured and classified according to the rules now in force in the Ratnágiri Survey. It was then found that the survey rates were only about one-half of the rates hitherto paid under the existing leases, and the question arose as to the mode in which Government should deal with these crown lands the leases being terminable on the introduction of a general survey.

In many of the farms, cocoanut, betelnut, and cashewnut plantations had been made at very considerable cost. Substantial houses and farm steadings had been built, both by the crown lessees and by their sub-tenants, most of whom had been on the ground from the beginning of the lease and had been encouraged by the crown lessees to improve their holdings and settle permanently. The further question, therefore, arose whether the sub-tenants had acquired by prescription or otherwise any rights of tenure which it behoved Government to consider and provide for.

After very full discussion Government decided to retain the *sheri thikáns* strictly as crown lands, in preference to parting with the proprietary right for a sum equal to a certain number of years' assessment which the old lessees and many persons were

¹ Gov. Res. 1056, 9th April 1852.

ready to give if the lands should be entered in their names as survey occupants. Government also took the most liberal view of the claims of the existing lessees, derived from long occupation and considerable expenditure, and renewed the leases to them for a fresh term of thirty years on their relinquishment of all lands selected for forest reserves. As to the sub-tenants, the Collector was ordered to prepare a record of their rights in all cases where there was no dispute as to their tenure between landlord and tenant. Where there was a dispute the Collector might decide it, if both parties agreed to abide by his decision. In other cases he was not to interfere.

Secondly, there were the lands held on the *katuban* tenure. The word *katuban* in itself implies a fixed rent not liable to fluctuation. From the preamble of most of the *katuban* deeds it would seem that the origin of the tenure was as follows. The hereditary occupant of certain lands of a poor description would represent to the state officials that if they were let to him on a fixed rent, *katuban*, he would bring them under full cultivation, and he was granted the lands accordingly, on a fixed rent, on the ground of the expense to which he would be put. In other words the occupant asked for a permanent settlement, in order that he might safely invest his capital in the land and avoid being taxed for his improvements, and his request was granted. Moreover, the deed declared that the lands should be enjoyed hereditarily from father to son, that no new deed was to be expected, and that the fixed assessment would cover any new plantations of cocoa or betel palms, or any other crop that might be cultivated. At the late survey all these lands were re-measured and classified according to the rules in force in Ratnágiri, and the result showed that they were held at rates considerably below the survey assessment. Government, however, decided that the settlement had been permanent and must hold good in the future.¹

Thirdly, there were the *gair dasti* lands, or lands which, as the word imports, were waste and unassessed, *gair*, without, and *dast*, rent or assessment. The *gair dasti* lands consist almost entirely of hill sides, which being uncultivated at the time of the last survey under native rule, were left unassessed. They are not, like the *sheri thikáns*, lapsed assignments of lands for service or otherwise, but still come properly under the category of crown lands. Though unassessed, they have for a great number of years been used by the *dhárekáris* or holders of the neighbouring rice fields, for gathering grass and brushwood for ash manure. The hill side has in most cases, by some tacit or mutual agreement, been divided among the *dhárekáris*, who have thus each held an apportioned share of what might otherwise have come to be regarded as common land. At the date of the British accession no regular revenue was derived from these lands. By degrees a system sprang up of leasing them for short periods to contractors. Persons were found

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Katuban.

Gair Dasti Lands.

¹ Gov. Res. 513, 29th January 1880.

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cultivating in them without permission, but their occupation was not disturbed when they consented to execute an agreement to pay a certain rent. Thus, by degrees, with the increased demand for land, the whole area was leased under various agreements. Most of these leases were granted between 1853 and 1854, and declared that the lease should hold good until the new survey settlement. The leases, when no specific agreement had been entered into with individuals, were for large blocks of hill side, and were put up to auction. They were usually bought in by one of the *dhárekáris* of the village, put forward by the whole body. This nominee collected the rent proportionately due by each occupant, and adding his own share, paid the whole to Government. He did not acquire any more land by becoming the nominal lessee. He was, in fact, merely a puppet put forward by the villagers to go through the form of executing the lease with Government, so that they might each and all be left in undisturbed possession of land acquired irregularly. In most cases, as a consequence of this harmonious arrangement, the leases, when put up to auction, realised a very small, almost a nominal rent, because no outsider dared to bid against the village community. Occasionally, but rarely, where there were two hostile factions in a village, the lease would realise a fancy price, and endless bickering was the result. Ordinarily the rent realised was nominal.

These lands also were remeasured and classified at the late survey, and as was to be expected, the survey assessment was found to be considerably in excess of the rent fixed in the lease which in every case was terminable on a new survey. Two questions then arose; *1st*, Whether the lessees or the actual occupants should be registered as the holders of the lands, or whether the leases should again be put to auction? *2nd*, Whether the lands should be re-let on the same rentals, or whether the survey assessment should be imposed? In view of the circumstances above related, Government determined that the actual occupant in each case should be registered as the survey occupant and pay the full survey assessment.¹

SECTION IV.—SEASON REPORTS.**Season Reports.**

The following is a summary of the chief available facts regarding the state of the district during the thirteen years ending 1878-79 :

1866-67.

In 1866-67, the rainfall of 106·5 inches was plentiful and seasonable, and with a few exceptions the crops were on the whole good. Near Khárepátan over-much rain destroyed half of the rice crop. In Anjanvel and Suvárdurg, though the first sowings were washed away, the harvest was fair. Public health was good, though in some parts cholera, fever, and cattle-disease prevailed to a slight extent. The land revenue for collection rose from £101,479 to £104,634 (Rs. 10,14,790 - Rs. 10,46,340), £172 (Rs. 1720) were remitted, and £808 (Rs. 8080) left outstanding. Rice rupee prices fell from

¹ Gov. Res. 2918, 7th June 1880.

fifteen to twenty-two pounds, and *náchni*, the food of the lower classes, from twenty-six to forty pounds.

In 1867-68, the rainfall of 92·5 inches was abundant, and the season favourable. Public health was good. The land revenue for collection fell from £104,634 to £87,562 (Rs. 10,46,340 - Rs. 8,75,620), £157 (Rs. 1570) were remitted, and £2331 (Rs. 23,310) left outstanding. Rice rupee prices rose from twenty-two to eighteen pounds, and *náchni* fell from forty to forty-three pounds.

In 1868-69, the rainfall was 88·32 inches. The monsoon began favourably, but later in the season the rainfall was partial and insufficient. On the whole, the season was scarcely an average one. With few exceptions public health was good. Cattle disease appeared in some places, but the mortality was not great. The land revenue for collection rose from £87,562 to £91,530 (Rs. 8,75,620 - Rs. 9,15,300), £150 (Rs. 1500) were remitted, and £1423 (Rs. 14,230) left outstanding. Rice rupee prices fell from eighteen to twenty pounds, and *náchni* rose from forty-three to twenty-eight pounds.

In 1869-70, the rainfall of 101·43 inches was short in the beginning, but plentiful in the latter part of the season. With a few exceptions the crops yielded well. Public health was on the whole good, and there was no great mortality among the cattle. The land revenue for collection rose from £91,530 to £93,406 (Rs. 9,15,300 - Rs. 9,34,060); £309 (Rs. 3090) were remitted, £227 of them on account of the introduction of the survey, and £1717 (Rs. 17,170) left outstanding. Rice rupee prices fell from twenty to twenty-three pounds, and *náchni* from twenty-eight to forty pounds.

In 1870-71, though not very seasonable, the rainfall of 93·37 inches was sufficient. Though small-pox, diarrhoea, dysentery, fever, and cattle-disease prevailed to a slight extent, public health was on the whole good. The land revenue for collection fell from £93,406 to £89,650 (Rs. 9,34,060 - Rs. 8,96,500), £1136 (Rs. 11,360) were remitted, £1074 of them on account of the introduction of the survey, and £1217 (Rs. 12,170) left outstanding. Rice rupee prices rose from twenty-three to twenty-one pounds, and *náchni* from forty to thirty-nine pounds.

In 1871-72, the rainfall was 73·80 inches. The rain set in very early, but till August the fall was insufficient, and rice did not yield a full harvest. On the whole the other crops yielded well, and the season was not unfavourable. Dysentery, small-pox, and cholera prevailed to a slight extent in some sub-divisions; and there was also slight disease among cattle. The land revenue for collection rose from £89,650 to £92,499 (Rs. 8,96,500 - Rs. 9,24,990), £1177 (Rs. 11,770) were remitted, £1052 of them on account of the introduction of the survey, and £3158 (Rs. 31,580) left outstanding. Rice rupee prices rose from twenty-one to twenty pounds, and *náchni* from thirty-nine to twenty-seven pounds.

In 1872-73, the rainfall of 84·12 inches was seasonable, and the harvest fair. Public health was on the whole good, though cholera, small-pox, and dysentery prevailed to a slight extent. In Mandan-gad, during a temporary scarcity of grain before harvest, fifty persons

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died from cholera, weakness, and want. Many cattle also died from weakness, and from a disease said to have been caused by the sudden and very heavy burst of the rains. The land revenue for collection fell from £92,499 to £91,422 (Rs. 9,24,990 - Rs. 9,14,220), £57 (Rs. 570) were remitted, and £2515 (Rs. 25,150) left outstanding. Rice rupee prices fell from twenty to thirty-two pounds, and *náchni* from twenty-seven to thirty-seven pounds.

1873-74.

In 1873-74, the rainfall of 83·64 inches, at first free and well timed, was later on scanty with long stretches of dry weather. The result was a harvest rather below the average. Except in Devgad, Málvan, Sangameshvar, and Khed, fever, small-pox, dysentery, and cattle-disease prevailed to a slight extent. The land revenue for collection fell from £91,422 to £88,997 (Rs. 9,14,220 - Rs. 8,89,970), £75 (Rs. 750) were remitted, and £1365 (Rs. 13,650) left outstanding. Rice rupee prices rose from thirty-two to twenty-seven pounds, and *náchni* fell from thirty-seven to fifty pounds.

1874-75.

In 1874-75, the rainfall was 121·60 inches. In June, July, and August, the fall was on the whole favourable, but in September a heavy downpour did great harm to the early crops. The late crops suffered from want of rain in October, and in some places from insects. Except in Dápoli, Chiplun, and Sangameshvar, fever, dysentery, small-pox, and cattle-disease prevailed over most of the district. The land revenue for collection rose from £88,997 to £89,707 (Rs. 8,89,970 - Rs. 8,97,070), £99 (Rs. 990) were remitted, and £653 (Rs. 6530) left outstanding. Rice rupee prices rose from twenty-seven to twenty-five pounds, and *náchni* from fifty to forty-five pounds.

1875-76.

In 1875-76, the rainfall of 136·48 inches was unseasonable and unequal, very heavy at one time and scanty at another. The failure of crops was, in rice-fields, estimated at from $\frac{1}{4}$ to $\frac{3}{4}$, and in uplands at from $\frac{1}{2}$ to $\frac{3}{4}$. Public health was bad. Except in Sangameshvar, cholera prevailed everywhere and carried off 762 persons. Fever was also common in Dápoli, Devgad, Málvan, and Rájápur. Cattle disease broke out all over the district causing the loss of 1625 head of cattle. The land revenue for collection fell from £89,707 to £89,383 (Rs. 8,97,070 - Rs. 8,93,830), £769 (Rs. 7690) were remitted, £706 of them on account of the introduction of the survey; and £592 (Rs. 5920) left outstanding. Rice rupee prices rose from twenty-five to twenty-three pounds, and *náchni* from forty-five to thirty-three pounds.

1876-77.

In 1876-77, the rainfall of 68·25 inches was scanty, and the complete failure of the October rains seriously injured the late *nágli* and *harik*, and to some extent the rice. The loss in *nágli* and *rari* was set down at $\frac{3}{4}$, and in rice at $\frac{3}{4}$. *Harik* was a complete failure. This failure caused distress amongst the poorest classes for whom a few relief works were opened. Though public health was on the whole good, dysentery prevailed in Málvan, Ratnágiri, Rájápur and Chiplun, and small-pox in all parts of the district but Rájápur. Cattle disease was fatal in 1154 cases. The land revenue for collection rose from £89,383 to £90,882 (Rs. 8,93,830 - Rs. 9,08,820),

£1112 (Rs. 1120) were remitted, and £1706 (Rs. 17,060) left outstanding. Rice rupee prices rose from twenty-three to seventeen, and *nāchni* from thirty-three to twenty-four pounds.

In 1877-78, the rainfall of 89·71 inches, though fitful and uneven, was on the whole favourable; and despite blight and insects, the outturn in rice and *nāgli* was good. Up to the end of July cholera and dysentery were general. Cattle disease of one kind or other also prevailed in most sub-divisions and carried off 985 head of cattle. The land revenue for collection rose from £90,882 to £93,772 (Rs. 9,08,820 - Rs. 9,37,720), £73 (Rs. 730) were remitted, and £1112 (Rs. 11,120) left outstanding. Rice rupee prices remained the same, seventeen pounds, while *nāchni* fell from twenty-four to twenty-five pounds.

In 1878-79, the rainfall of 165·66 inches was the highest on record. The season was on the whole favourable, rice especially yielding a good outturn. The land revenue for collection fell from £93,772 to £93,357 (Rs. 9,37,720 - Rs. 9,33,570), £78 (Rs. 780) were remitted, and £1092 (Rs. 10,920) left outstanding. Rice rupee prices fell from seventeen to twenty-three pounds, and *nāchni* from twenty-five to twenty-eight pounds.

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CHAPTER IX.

JUSTICE.

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1756 - 1880.

UP¹ to the year 1812, except the fort and factory of Bánkot and nine surrounding villages handed over by the Peshwa in 1756, the British Government had no territory south of the river Apta. The Resident of Bánkot, who was also the commandant of the garrison, did not at first enjoy extensive judicial powers. He could only expel persons of a suspicious character under severe penalties, and all offenders were sent for examination and trial before His Majesty's Justices in Bombay. This state of things lasted till, in 1803, the civil and criminal jurisdiction of the Judge and Magistrate of Sálsette was extended to Bánkot, the court adjourning there for twenty days in each year. In 1811 the Bánkot Resident was invested with power to decide civil cases of not more than £10 (Rs. 100), an appeal lying against his decision to the Circuit Judge at Sálsette. He was at the same time placed in police charge of the district, and persons committed or held to bail were remanded to Thána to take their trial there. In 1812, when Málvan and the surrounding districts were ceded by Kolbápur, a Resident was appointed with jurisdiction to try civil suits of not more than £50 (Rs. 500), an appeal lying, as in the case of Bánkot decisions, to Sálsette. Owing to the distance of Málvan from Sálsette the Resident was, in 1814, invested with increased powers, both civil and criminal, and made to some extent independent of Sálsette authority. In 1815 the jurisdiction of both the Residents was further extended. Their decisions in suits above £10 (Rs. 400) were subject to an appeal to the Governor in Council, in the separate department of the chief court of justice, *Sadar Adalat*. Offenders were no longer sent to Thána for trial. The Circuit Judge went to Bánkot and Málvan to deliver the jails twice a year.

1819

This arrangement continued till 1819, when the whole of the present Ratnágiri district passed into the hands of the English. In that year the two Residencies were abolished, and the southern Konkan was formed into a separate collectorate with Bánkot as its head-quarters. In 1820 Ratnágiri was chosen as the most central and convenient place for the civil station of the district. The powers of Magistrate were modified and transferred from the Judge to the Collector, and the Judge constituted the Criminal Judge of the district with charge of the head-quarter police. The judicial machinery

¹ Contributed by Mr. W. Wedderburn, C.S., District Judge, Ratnágiri.

consisted of a Judge, a registrar, an assistant registrar, and two native commissioners. In the same year two more native commissioners were added. In 1827, when the territorial limits of the district were re-arranged, the courts of civil and criminal jurisdiction were constituted anew. The staff of native commissioners was increased and the offices of registrar and assistant registrar abolished, and that of assistant judge created in their place. In 1830, when three of its northern sub-divisions were placed under the direct control of the Thána Judge, Ratnágiri was, for purposes of civil and criminal justice, reduced to a detached station of the Thána district, with a senior assistant judge and sessions judge. Ratnágiri remained a detached station under Thána till 1869.

In 1836, the designation of native commissioner was altered to *munsif* and *sadar amin*. In 1838, the oldest year for which detailed statistics are available, there were seven courts and 2805 decisions. Twelve years later (1850) there were six courts and 4303 decisions. In 1851, owing to press of work, a Joint Judge was stationed at Ratnágiri for one year. In 1860 there were six courts and 5580 decisions. From 1866 to 1869 a Joint Judge was again appointed, and in 1869 Ratnágiri was made a distinct district, and a Judge and assistant judge permanently stationed there. The staff of judicial functionaries was increased, and in 1870 there were in all nine judges and 6375 decisions. In 1872 an extra assistant judge was appointed for a year, and in 1875 an additional sub-judge was stationed at Dápoli. In 1879 the sub-judge's court at Sangameshvar was removed to Devrukh.

At present there are in all ten judges in the district. Of these the District Judge is the chief, with original civil jurisdiction over the whole of the district, and power to hear appeals against the decisions of subordinate courts. The assistant judge tries original cases below £1000 (Rs.10,000), and such appeal cases below £500 (Rs.5000) as are referred to him by the District Judge. The first class subordinate judge at Ratnágiri, in addition to his ordinary jurisdiction, exercises special jurisdiction over the whole district in respect of original civil suits of more than £500 (Rs.5000) in value. The other sub-judges are stationed at the chief sub-divisional towns of Dápoli, Chiplun, Devrukh, Rájápur, Devgad, Málvan, and Vengurla. The ordinary jurisdiction of the Ratnágiri sub-judge extends over the greater part of the Ratnágiri sub-division; that of the Dápoli sub-judge over the Dápoli sub-division and some villages of the Khed sub-division; that of the Chiplun sub-judge over the greater part of the Chiplun sub-division and some villages of the Khed sub-division; that of the Devrukh sub-judge over the greater part of the Sangameshvar sub-division and some villages of the Chiplun sub-division; that of the Rájápur sub-judge over the Rájápur sub-division and some villages of the Sangameshvar sub-division; that of the Devgad sub-judge over the Devgad sub-division and some villages of the Málvan sub-division; that of the Málvan sub-judge over the greater part of the Málvan sub-division; and that of the Vengurla sub-judge over the Vengurla sub-division and some villages of the Málvan sub-division.

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1856-1880.

Judicial Staff,
1880.

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The average distance from their six furthest villages, of the District and assistant district judges' courts, and of the first class sub-judge's court at Ratnágiri as regards its special jurisdiction, is seventy-eight miles. As regards the ordinary jurisdiction of the Ratnágiri sub-judge, the average distance is nineteen miles; that of the Dápoli sub-judge $31\frac{1}{2}$ miles; that of Chiplun $22\frac{1}{2}$ miles; that of Devrukh $30\frac{5}{8}$ miles; that of Rájápur $30\frac{1}{2}$ miles; that of Devgad $34\frac{1}{4}$ miles; that of Málvau, thirteen miles; and that of Vengurla $12\frac{1}{2}$ miles.

**Working of
Courts.**

At first the working of the courts was far from satisfactory. The decisions, especially in cases where the cause of action arose before their institution, were unduly favourable to the creditors. The long distances the people had to come was a great evil. Money was wanted to take a man from his home to the court, and as ready cash was most difficult to raise, men were ruined from no fault but poverty. Ex-parte decrees were a great evil. Intriguing suitors managed to have the summons served so late that the defendant could not be in time and so lost his case.¹

Partly from the litigious character of the people and partly from the minute sub-divisions of Khot estates, and until lately their uncertain relations to Government and the subordinate land-holders, civil suits in Ratnágiri have always been specially numerous and troublesome.²

The average number of cases decided during the nine years ending 1878 was 7121. During the first five years, the total rose from 6375 in 1870 to 7290 in 1873, with a slight fall in 1874. It then again rose to 7601 in 1876, and again fell to 6918 in 1877. In 1878 it rose to 7331. Of the total number of cases decided during the nine years, 53·17 per cent have, on an average, as shown in the margin, been given against the defendant in his absence. The proportion of cases decided in this way has varied little except in 1873 when it rose to 57·69 and in 1878 when it fell to 46·05. Of contested cases only 19·39 per cent have, during this period of nine years, been on an average decided for the defendant. The percentage of such cases decided in favour of the defendant fell from 22 in 1870 to 21·03 in 1878. In 230 or 3·13 per cent of the whole number of suits decided in 1878, the decree was executed by putting the plaintiff in possession of the immoveable property claimed. The number of cases of this kind fell from 101 out of 6375 in 1870 to 197 out of 7290 in 1873,

*Ratnágiri Ex-parte Decrees,
1870-1880.*

YEAR.	Suits.	Decreed Ex-parte.	Percentage
1870 ..	6375	3441	53·97
1871 ..	6834	3578	52·06
1872 ..	6904	3876	55·65
1873 ..	7290	4206	57·69
1874 ..	7282	3891	53·44
1875 ..	7502	4029	53·70
1876 ..	7601	4123	54·24
1877 ..	6918	3582	51·77
1878 ..	7331	3376	46·05
Total	64,097	33,982	53·17

¹ Bom. Rev. Rec. 121 of 1825, 88.

² In 1825, Mr. Dunlop noticed that the people seemed fond of going to law, and that the number of miscellaneous petitions was very much greater than in other districts. Bom. Rev. Rec. 121 of 1825, 58.

and then during the next five years rose to 230 out of 7331 in 1878. In 51·30 per cent of the decisions passed in 1878, decrees for money due have been executed by the attachment or sale of property. Of these 9·48 per cent have been by the sale of movable and 41·82 per cent by the sale of immovable property. Compared with 1870, the 1878 returns of attachments or sales of movable and immovable property show a rise from 400 to 695 in the former, and from 1845 to 3066 in the latter.

Compared with 1870, the number of decrees executed by the arrest of debtors during the nine years has considerably fallen, the total for 1870 being 389 against 70 in 1878. As will be seen from the following table, the number of civil prisoners has varied little during the nine years, the total in 1870 being 49 against 41 in 1878.

Ratnágiri Civil Prisoners, 1870-1878.

YEAR	PRISONERS	DAYS.	RELEASES				
			By satisfying the decree.	At creditor's request	No subsistence allowance	Disclosure of property.	Time expiry
1870 ...	49	23	4	10	33	2	..
1871 ..	64	38	3	8	45	4	1
1872 ..	40	22	1	2	29	8	...
1873 ...	55	25	2	6	41	6	...
1874 ...	56	39	4	9	37	4	2
1875 ...	63	23	1	5	50	5	1 a
1876 ...	52	31	2	3	43	...	4
1877 ...	53	19	4	9	37	...	3
1878 ...	41	27	...	4	34	...	3

(a) One was released on account of the decree being reversed in appeal.

Of the forty-one prisoners in 1878, thirty-six were Hindus and five Musalmáns.

The following statement shows in tabular form the working of the district civil courts during the nine years ending 1878 :

Ratnágiri Civil Courts, 1870-1878.

YEAR	Suits disposed of.	Average value.	UNCONTESTED.					CONTESTED				EXECUTION OF DECREES.			
			Decrees decreed <i>ex parte</i> .	Dismissed <i>ex parte</i> .	Decrees on confession.	Otherwise disposed of.	Total.	Judicial for Plaintiff	Judicial for Defendant	Mixed	Total.	Arrest of debtor.	Decree holder put in possession of immovable property.	Attachment or sale of property	
		Rs.												Immovable.	Movable.
1870	6375	7 7	441	10	424	686	1561	991	330	192	1513	389	401	1845	400
1871	6874	6 18	3578	30	454	1002	5016	1048	449	295	1790	225	323	2048	491
1872	6964	7 17	3876	19	424	997	5316	1067	310	271	1648	264	327	1898	418
1873	7290	7 4	4206	51	407	974	5638	1073	267	35	1675	168	197	3211	635
1874	7282	6 7	4891	125	386	1627	5429	1108	332	113	1553	193	165	3929	588
1875	7502	6 7	4029	169	353	1191	5632	1164	367	319	1850	179	224	3553	805
1876	7601	6 6	4123	279	336	1162	5906	1040	254	337	1631	152	199	4288	937
1877	6918	6 8	3582	253	310	929	5074	1034	366	441	1844	93	189	3369	742
1878	7331	6 17	3376	218	429	1121	5135	1289	462	154	2196	70	230	3066	695

(a) One referred to arbitrators. (b) Three referred to arbitrators.

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Debtors.

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Justice.

Arbitration
Court.

In August 1876, an association was formed at Ratnágiri for the purpose of settling by arbitration, *lacéd*, debt and other civil disputes. Though the association is not yet formally dissolved, the court has, since November 1877, been virtually closed for want of work. The members about forty-eight in number are merchants, bankers, Government pensioners, pleaders, and newspaper editors. The business was managed by a committee helped by a secretary. Three of the members attended in turn to dispose of business. Before a case was heard, the parties stated in writing that they would be bound by the court's award. Pleadings, if the parties wished, were allowed to appear. The award was passed according to the opinion of the sitting members or of a majority of them, and unless the parties applied for a review, the award was final. Unless they were filed in the civil courts, these arbitration awards had no legal force. The members received no pay. To meet the expenses, except in pauper suits, an institution fee of one-fourth or one-sixth of the proper court fee was levied according as the suits were below or above £5 (Rs. 50) in value. In references from the civil courts, one-eighth of the court fee or 1s. (8 *annas*) was levied for each sitting. If the defendant absented himself, the whole fees, or in case of amicable settlement, half the fees, were refunded. During the fifteen months of the court's existence (21st August 1876 to 23rd November 1877), of fifty-six suits filed, twenty-four were decided, twenty-four withdrawn or compromised, and eight dismissed.

Registration.

There is registration enough to employ ten sub-registrars, eight of whom are special, and two, head clerks to the Sangameshvar mámlatdár and the Guhágár mahálkari, belong to the ex-officio class of sub-registrars. The special sub-registrars are distributed one at each of the sub-divisional head-quarters. In addition to the supervision exercised by the Collector who is the District Registrar, a special scrutiny is, under the control of the Inspector General of Registration and Stamps, carried on by the Inspector of Registration for the third division of the Presidency, comprising the districts of Poona, Sátára, Sholápur, Ratnágiri, and Kolába. According to the registration report for 1877-78, the registration receipts for that year amounted to £1030 12s. 3d. (Rs. 10,306-2-0), and the charges to £776 13s. 3d. (Rs. 7766-10-0), leaving a balance of £253 19s. (Rs. 2539-8-0). Of 3327, the total number of registrations, twelve were wills, one was an authority to adopt, and twenty-six were documents affecting movable and 3288 affecting immovable property. Of these last, 1995 were mortgages, 955 deeds of sale, ten deeds of gift, 217 leases, and 111 miscellaneous. The registered value of the movable property was £592 8s. 4d. (Rs. 5924-2-8), and of the immovable property £111,480 7s. 3d. (Rs. 11,14,803-10-0), making a total of £112,072 15s. 7d. (Rs. 11,20,727-12-8).

As the long-pending *khot* disputes are now settled, it is likely that with increased transfers of land, the operations of the Registration department will become more important.

Criminal Justice.
Staff,
1880.

At present (1880) twenty-five officers share the administration of criminal justice. Of these, one is the District Magistrate, four are magistrates of the first class, and twenty of the second and

third classes. Of the former three are covenanted European civilians and one is a native. Except the District Magistrate, who has a general supervision over the whole district, each first class magistrate has an average charge of 1263 square miles and a population of 339,712 souls. In the year 1878, the District Magistrate decided two original and three appeal cases; and the four first class magistrates, 120 original and ninety-three appeal cases. As Collector and assistant collectors, the magistrates have revenue charge of the parts of the district in which they exercise magisterial powers, and the huzur deputy collector has charge of the treasury department of the Collector's office. Of subordinate magistrates of the second and third classes there are twenty, all of them natives with an average charge of 189 square miles and a population of 50,956 souls. In 1878, they decided 543 original criminal cases. Besides their magisterial duties, these officers exercise revenue powers as *mámlatdárs*, *mahálkaris*, or the head-clerks of *mámlatdárs*. Besides these, there are 1349 police *pátils* receiving in surveyed villages an average yearly allowance of £1 5s. 3d. (Rs. 12-10-2), and entrusted with the powers contemplated by the Bombay Village Police Act (Act No. VIII. of 1867). Of the whole number, twelve, under section 15 of the Act, can in certain cases fine up to 10s. (Rs. 5) and imprison for forty-eight hours. The others, under section 14, cannot fine and can imprison for only twenty-four hours.

There is no regular village police system. One of the leading villagers is generally chosen police *pátíl* for life or for a term of years, and the *Mhárs* help him, acting as watchmen.¹ In surveyed villages the police *pátíl* is paid from 8s. to £4 8s. (Rs. 4 - Rs. 44) a year, in unsurveyed villages he is unpaid.

From the table given below, it will be seen that during the five years ending 1878, 2426 offences, or one offence to every 420 of the population, were on an average committed. Of these there were on an average five murders and attempts to commit murder; two culpable homicides; twelve cases of grievous hurt and hurt by dangerous weapons; seven cases of dacoity and robbery; and 2396 or 98.76 per cent minor offences.

At the beginning of British rule (1820), Ratnágiri villages, rude clusters of thatched mud huts without the shelter of village walls, were subject to night attacks of *Mángs*, *Rámoshis*, and other Deccan gang robbers. The people were most weak and spiritless, never offering any combined resistance. In so rugged a country, without the help of the villagers, it was most difficult for the police to capture the robbers who generally made good their escape.²

The rugged and broken character of the country, its numerous hills, rivers, and streams are the chief special difficulties with which the Ratnágiri police have to contend. In the north, Vanjáris and Kátkaris occasionally commit petty thefts, but as a rule the district is free from these and other wandering tribes. Among the better classes, abetting petty crimes, making groundless complaints,

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Justice.

Criminal Justice.

Staff,
1880.

Village Police.

Offences,
1874-1878.

District Police.

¹ Further details have been given above, p. 140

² Mr H. P. Pelly Collector, Bom. Rev. Rec. 16 of 1821 334-336

Chapter IX.**Justice.****District Police.**

giving false evidence, and bribery and forgery are the most common forms of crime. Though very law-abiding, the people are most litigious, the smallest differences in matters of right or custom resulting in a series of legal proceedings. The first phase of a dispute about immovable property is invariably an accusation of criminal trespass, or mischief in removing a wall or hedge, or theft in taking the produce of a disputed field or tree. The decision in such cases generally serves as a standing ground or evidence in a civil suit that follows.¹ Agrarian offences are rare. The *khots*, who are also the moneylenders, are sometimes at the instigation of the villagers waylaid and murdered, and their houses and haystacks set on fire. But this does not often happen.²

**Strength,
1878.**

In 1878 the total strength of the district or regular police force was 743. Of these, under the District Superintendent, two were subordinate officers, 121 inferior subordinate officers, and 619 foot constables.

Cost.

The cost of maintaining this force was, for the Superintendent a total yearly salary of £840 (Rs. 8400); for the two subordinate officers on yearly salaries of not less than £120 (Rs. 1200), and the 121 inferior subordinate officers on yearly salaries of less than £120 (Rs. 1200), a total yearly cost of £3060 8s. (Rs. 30,604); and for the 619 constables a sum of £5907 (Rs. 59,070). Besides their pay, a total yearly charge of £441 (Rs. 4440) was allowed for the horses and travelling expenses of the superior officers; £206 8s. (Rs. 2064) for yearly pay and travelling allowance of their establishments; and £926 (Rs. 9260) a year for contingencies and other expenses, raising the total yearly charges to £11,383 16s. (Rs. 1,13,838). On an area of 3789 square miles and a population of 1,019,136 souls, these figures give one man for every 5.1 square miles and 1372 souls. The cost of the force is £3 0s. 1d. (Rs. 30-0-8) the square mile, or 2½d. (1½ annas) a head of the population.

Disposal.

In 1878 of the total strength of 742, exclusive of the Superintendent, nine, two of them officers and seven constables, were employed as guards at district or subsidiary jails; 128, sixteen of them officers and 112 constables, were engaged as guards over treasuries, lock-ups, or as escorts to prisoners and treasure; 561, 100 of them officers and 461 constables, were engaged on other duties, and forty-four, five of them officers and thirty-nine constables, were stationed in towns and municipalities or employed on harbour duty. Of the whole number, exclusive of the Superintendent, 360 were provided with fire arms; thirty-two with swords or with swords and batons; and 350 with batons only; 366, seventy-six of them officers and 290 constables, could read and write; and 115, six of them officers and 109 constables, were under instruction.

¹ Mr. A. T. Crawford Collector, Police Report, 1878.

² Such a case of dacoity occurred on the night of the 27th March 1874, at the village of Harkol in Devgad. The house of one Mahadaj *khot* was attacked by some forty men armed with sticks. Property worth £130 (Rs. 1300) was taken and the *khot* severely beaten. The offenders were not discovered. It seems that the robbery was committed by some strangers with the villagers' help. Revenge seems to have been the chief motive. Only the day before, the property of three of the villagers had, at the *khot's* instigation, been sold under a decree of the court.

Except the European Superintendent, all the members of the police force were natives of India. Of these, ten officers and twelve constables were Bráhmans; fifty-two officers and 331 constables were Maráthás including Sávants; and forty-three officers and 214 constables were Hindus of other castes, including Vánis, Bhandáris, Gábíts, and Mhárs; one, the Superintendent, and five constables were Christians; and fourteen officers and sixty-one constables were Musalmáns.

In 1878, of twenty-four persons accused of heinous crimes, fourteen or 58·33 per cent were convicted. Of 2717, the total number of persons accused of crimes of all sorts, 1104 or 40·63 per cent were convicted. In the matter of the recovery of stolen property, of £2659 16s. (Rs. 26,598) alleged to have been stolen, £1583 4s. (Rs. 15,832) or 59·33 per cent of the whole amount were recovered.

The following table gives the chief crime and police details for the five years ending 1878 :

Ratnágiri Crime and Police, 1874-1878.

YEAR.	OFFENCES AND CONVICTIONS.															
	Murder and Attempt to Murder.				Culpable Homicide.				Grievous Hurt				Dacoities and Robberies.			
	Cases.	Arrests.	Convictions.	Percentage.	Cases.	Arrests.	Convictions.	Percentage.	Cases.	Arrests.	Convictions.	Percentage.	Cases.	Arrests.	Convictions.	Percentage.
874 ...	5	13	6	46·15	1	1	1	100	6	7	4	57·14	4	12	2	100
875 ...	7	8	5	62·50	1	1	...	...	17	20	14	70·00	9	9	5	83·33
876 ...	4	4	1	25·00	3	5	4	80	15	18	8	41·44	3	1	1	100
877 ...	3	6	...	...	4	5	4	80	15	11	3	27·27	10	11	5	45·45
878 ...	6	8	5	62·50	1	1	1	100	9	10	3	30·00	9	5	5	100
Total ..	25	39	17	43·58	10	13	10	76·9	59	65	32	48·4	35	25	18	72

YEAR.	OFFENCES AND CONVICTIONS—continued.								PROPERTY.		
	Other Offences				Total.				Stolen.	Recover- ed.	Percent- age.
	Cases.	Arrests.	Convictions.	Percentage.	Cases.	Arrests.	Convictions.	Percentage.			
1871 ...	1755	3257	854	26 22	1771	3280	867	26 43	£ 97 5	£ 410 6	58 83
1875 ...	2237	2490	944	37 91	2271	2525	968	38 33	1009 6	761 10	71 21
1876 ...	1968	2384	1128	47 31	1993	2412	1142	47 34	1613 18	1088 6	66 29
1877 ...	2448	2721	1175	43 13	2406	2757	1187	43 05	3090 16	1777 14	51 04
1878 ...	3576	2803	1009	40 48	3508	2717	1104	40 63	2559 1	1583 4	59 33
Total	11,984	13,548	5091	37 5	12,129	13,691	5268	38 4	9161 4	5421 0	59 1

Corresponding details are available for the five years ending 1849.

Chapter IX.

Justice.

District Police.

Race,
1878.

Working.

Crime,
1874-1878.

Chapter IX.

Justice.

1845-1849.

Crime.

Ratnágiri Crime, 1845-1849.

YEAR.	Murder.	Homicide.	Robbery including cattle theft.	Arson.	Miscellaneous.	Total.	Arrests.	Convictions.	Percentage.	Property stolen.	Property recovered.	Percentage.
1845	1	1	50	18	1623	1693	3172	1612	50.81	983 12	74 4	7.01
1846	6	...	71	11	1764	1854	3159	1512	48.00	2130 2	215 10	10.51
1847	6	...	64	6	1751	1827	3518	1912	54.34	1238 6	241 12	19.51
1848	9	3	64	6	1883	1965	3295	1634	49.59	1954 16	716 2	36.69
1849	1	1	95	5	1575	1677	3167	1616	51.02	3392 4	1730 4	48.13
Total	23	5	344	45	8523	9016	16,202	8296	50.82	9904 0	2977 12	30.06

1845-1849,
and
1874-1879.

A comparison of the two statements shows for the whole amount of crime a comparative decrease from the yearly average of 1803 in the five years ending 1849, or on the basis of the 1846 census one crime to every 347 inhabitants, to a yearly average of 2426 in the five years ending 1878, or on the basis of the 1872 census one crime to every 420 inhabitants. The largeness of the head Miscellaneous, in the first period, was due to a number of cases of treason and rebellion, arising out of the disturbances in Kolhápúr and Sávantrádi. Murder cases are few. They were formerly, as they still are, the result of acts of adultery. Arson, formerly shown separately with a yearly average of nine cases, is now much less common. In robbery and dacoity there is a considerable falling off from a yearly average of sixty-nine to seven. Formerly crimes of this class were generally committed at night, and the offenders were scarcely ever detected.

In 1878, for protection of life and property, 3284 gun licenses were granted. These, in the Commissioner's opinion, are necessary, as the eastern districts, bordering for nearly 200 miles with the Sahyádris, abound in wild beasts.

Jails.

Besides the accommodation provided for under-trial prisoners at the head-quarters of each sub-division, there is near the Collector's office at Ratnágiri a district criminal jail. Built about fifty-three years ago, it has accommodation for 320 prisoners. The wards for the prisoners, which are vaulted and iron-barred in front, are in a circle in the centre of the jail. Outside this circle there are three other wards, for females, quarantine, and untried prisoners, and four worksheds. The jail is managed by a staff twenty-three strong, and had, in 1879, a total population of 767 prisoners, a large number of whom were transfers from the Bombay and Thána jails. The daily average was 346. Nearly two-thirds of the prisoners were employed extramurally, in gardening, quarrying, and on public works. The jail industries are cottoncloth-weaving, carpet-making, coir-matting, and cane-plaiting. The total cost in 1879 was £1951 (Rs. 19,510) or an average of £5 12s. (Rs. 56) to each prisoner. There are two gardens, one in front of the jail and separated from it by the road, the other within the compound at the back. The jail is remarkably healthy, the average death rate for the last ten years having been only 1.4 per cent of average strength.¹

¹ Dr. F. C. Barker, Superintendent Ratnágiri Jail.

CHAPTER X.

REVENUE AND FINANCE.

THE earliest balance sheet of the district, as at present constituted, is for 1832-33. From territorial changes, older accounts are useless for purposes of comparison. Since 1833 several changes have taken place in the system of accounts, but most items can be arranged under corresponding heads in the forms now in use. Exclusive of the adjustment on account of alienated lands, the total transactions entered in the district balance sheet for 1878-79 amounted, under receipts, to £230,470 (Rs. 23,04,700) against £117,829 (Rs. 11,78,290) in 1832-33, and under charges, to £206,762 (Rs. 20,67,620) against £135,628 (Rs. 13,56,280). Exclusive of departmental miscellaneous receipts and payments in return for services rendered, such as post and telegraph receipts, the 1878-79 revenue under all heads, Imperial, provincial, local, and municipal, came to £136,249 (Rs. 13,62,490), or on a population of 1,019,136 souls, a share of 2s. 8½d. (Rs. 1-5-6) per head. The corresponding receipts in 1832-33 amounted to £91,528 (Rs. 9,15,280), which, according to the 1846 population of 625,782 souls, gave per head a share of 2s. 11d. (Rs. 1-7-4).

During the last forty-seven years the following changes have taken place under the chief heads of receipts and charges: Land revenue receipts, forming 68·85 per cent of £136,249 (Rs. 13,62,490) the entire revenue of the district, have risen from £66,080 (Rs. 6,60,800) in 1830-31 to £93,807 (Rs. 9,38,070) in 1878-79. The increase is chiefly due; (1) to the large area of land brought under tillage; (2) to the rise in produce prices, as in some parts of the district the Government assessment is still collected in kind; and (3) to the more correct measurements introduced with the survey. The land revenue charges show an increase from £11,157 to £33,665 (Rs. 1,11,570 - Rs. 3,36,650). This is partly due to new grants and increase of cash allowances to village officers and partly to general administrative changes.

The following statement¹ shows the land revenue collected in each of the forty-seven years ending 31st July 1879:

Ratnagiri Land Revenue, 1830-1879.

YEAR.	Land Revenue.	YEAR.	Land Revenue.	YEAR	Land Revenue	YEAR	Land Revenue
	£		£		£		£
1830-31	66,080	1835-36	73,492	1840-41	81,445	1845-46	83,798
1831-32	68,681	1836-37	74,500	1841-42	75,801	1846-47	82,959
1832-33	70,471	1837-38	75,945	1842-43	58,290	1847-48	87,265
1833-34	72,000	1838-39	73,797	1843-44	60,924	1848-49	70,748
1834-35	79,037	1839-40	65,712	1844-45	82,655	1849-50	66,960

¹ Figures for the years between 1830 and 1867 are taken from Statement No. 9 in Mr. Bell's Excise Report, dated 1st October 1869. Figures for subsequent years are taken from the Annual Reports.

Chapter X.

Revenue and Finance.

Land Revenue.

Ratnágiri Land Revenue, 1830-1879—continued.

YEAR.	Land Revenue.	YEAR.	Land Revenue.	YEAR.	Land Revenue.	YEAR.	Land Revenue.
	£		£		£		£
1850-51 ..	65,163	1858-59 ...	80,011	1866-67 ...	104,634	1874-75 ...	96,176
1851-52 ..	61,558	1859-60 ...	91,603	1867-68 ...	87,719	1875-76 ...	82,880
1852-53 ..	64,500	1860-61 ...	79,554	1868-69 ...	95,564	1876-77 ...	87,672
1853-54 ..	69,142	1861-62 ...	84,830	1869-70 ...	90,717	1877-78 ...	90,755
1854-55 ..	69,358	1862-63 ...	85,514	1870-71 ...	94,187	1878-79 ...	93,807
1855-56 ..	70,834	1863-64 ...	105,912	1871-72 ...	92,659		
1856-57 ..	72,234	1864-65 ...	110,677	1872-73 ...	95,341		
1857-58 ..	76,120	1865-66 ...	101,479	1873-74 ...	92,442		

Stamps

Stamp receipts have risen from £1620 to £14,482 (Rs. 16,200 - Rs. 1,44,820), and stamp expenditure from £20 to £394 (Rs. 200 - Rs. 3940). The increase under both heads is due to changes in the law and administration of the stamp revenue.

Excise.

Excise receipts have fallen from £13,341 to £8006 (Rs. 1,33,410 - Rs. 80,060). Many old cesses such as the house-tax, buffalo-tax, and others were abolished in 1844. The expenditure amounted in 1878-79 to £19 (Rs. 190). There are many cocoa palms along the coast and a fair number of wild date, *shindi*, trees in the villages near the Sahyádris. From the juice of these trees Bhandáris manufacture spirits and sell them to the liquor farmers at a fixed price. Since 1868, the assessment on each tapped cocoa palm has been 1s. (8 annas).

Justice.

Law and justice receipts have risen from £367 to £815 (Rs. 3670 - Rs. 8150), and the expenditure from £10,876 to £17,333 (Rs. 1,08,760 - Rs. 1,73,330). The rise in the expenditure is due to an increase in the pay of officers and establishment and to the opening of new civil courts.

Forests.

Forests is a new head. The receipts in 1878-79 amounted to £835 (Rs. 8350) and the expenditure to £1161 (Rs. 11,610).

Assessed Taxes.

The following table shows, exclusive of official salaries, the amount realised from the different assessed taxes levied between 1860 and 1879. Owing to their variety of rates and incidence it is difficult to make any satisfactory comparison of the result:

Ratnágiri Assessed Taxes, 1860-1879.

YEAR.	Amount	YEAR.	Amount	YEAR.	Amount
	£		£		£
<i>License Tax.</i>		<i>License Tax.</i>		<i>License Tax.</i>	
1860-61 ...	2001	1867-68 ...	2670	1869-70 ...	1869
1861-62 ...	5727			1870-71 ...	2103
1862-63 ...	3974			1871-72 ...	1255
1863-64 ...	2789	<i>Cattle-tax.</i>		1872-73 ...	715
1864-65 ...	2201	1868-69 ...	851	<i>License Tax.</i>	
				1878-79 ...	4222

Customs

Customs receipts have fallen from £7698 to £289 (Rs. 76,980 - Rs. 2890).

Salt.

Salt receipts have risen from £1352 to £36,071 (Rs. 13,520 - Rs. 3,60,710), and salt expenditure from £12 to £3526 (Rs. 120 - Rs. 35,260).

Rs. 35,260). The increase in the receipts is due to the enhanced rate of duty. In 1832-33 salt and customs transactions were shown separately; they were subsequently amalgamated and in 1871 again separated.

Military charges have fallen from £57,443 to £46,190 (Rs. 5,71,430 - Rs. 4,61,900); the decrease is due to the abolition of the military cantonment at Dápoli and the total withdrawal of troops.

Postal receipts have risen from £258 to £4199 (Rs. 2580 - Rs. 41,990), and post expenditure from £336 to £4538 (Rs. 3360 - Rs. 45,380).

Telegraph is a new head. The 1878-79 receipts amounted to £366 (Rs. 3660) and the expenditure to £337 (Rs. 3370).

Registration receipts have risen from £45 to £1201 (Rs. 450 - Rs. 12,010). In 1832-33 there were no charges; they have since risen to £736 (Rs. 7360).

Education receipts, a new item, amounted in 1878-79 to £313 (Rs. 3130). The expenditure has risen from £124 to £1656 (Rs. 1240 - Rs. 16,560).

Police charges have risen from £65 to £11,237 (Rs. 650 - Rs. 1,12,370). The increase is due to the removal of the military and to the reorganization of the police force.

Medical charges have risen from £1749 to £2886 (Rs. 17,490 - Rs. 28,860).

The 1878-79 receipts, £491 (Rs. 4910) against £33 (Rs. 330) in 1832-33, represent the earnings of the Ratnágiri jail. The charges have risen from £37 to £2075 (Rs. 370 - Rs. 20,750).

Transfer receipts have risen from £17,739 to £56,132 (Rs. 1,77,390 - Rs. 5,61,320), and expenditure from £35,517 to £49,090 (Rs. 3,55,170 - Rs. 4,90,900). The increased receipts are due to local funds income, to remittances from other treasuries, and to the adjustment of advances on account of boundary mark expenditure.

In the following balance sheets for 1832-33 and 1878-79, the figures shown in black type on both sides are book adjustments. On the receipt side the item £7975 (Rs. 79,750) represents the additional revenue the district would yield had none of its lands been given away. On the debit side the item £865 (Rs. 8650) under land revenue is the rental of the lands granted for service to village and district officers. The item £7110 (Rs. 71,100) shown under allowances and assignments, represents cash allowances, the rental of lands granted to hereditary district officers whose services have been dispensed with, and religious and charitable grants continued from former governments. Cash allowances to district and village hereditary officers are treated as actual charges and debited to land revenue.

Chapter X. Revenue and Finance.

Military.

Post.

Telegraph.

Registration.

Education.

Police.

Medicine.

Jail.

Transfers.

Balance Sheet,
1832-33 & 1878-79.

Chapter X.

Revenue and Finance.

Balance Sheet,
1832-33 & 1878-79.

SERVICE.	RECEIPTS.		
	Head.	1832-33.	1878-79.
		£ s. d.	£ s. d.
<i>Imperial.</i> A.—Supervised by the Collector.	Land Revenue	64,101 8 9	93,807 19 2
	Stamps	7611 1 7	7975 4 11½
	Excise	1619 18 1½	14,482 3 7½
	Law and Justice	13,341 7 6	8005 13 6½
	Forests	626 4 4½	815 12 6½
	Assessed Taxes	367 10 1	835 14 10½
	Miscellaneous ... ..	.....	4222 0 0
	Interest on advances, loans, and arrears.	33 2 9	295 2 6½
	.....	.....	49 12 4½
	Total ...	79,463 7 5½	122,514 3 7½
		8237 5 11½	7975 4 11½
B.—Administered by Departmental Heads.	Customs	7698 13 0	289 11 1½
	Salt	4352 2 11½	36,070 19 9½
	Public Works... ..	.....	7142 9 10½
	Military ... ..	.....	1115 15 9½
	Mint ... ..	.....	5 8 11½
	Post	258 9 1½	4199 11 4½
	Telegraph ... ..	.....	366 16 0
	Total ...	12,303 5 3½	49,480 12 11½
<i>Provincial.</i>	Registration	45 12 0	1201 8 1½
	Education ... ..	.....	313 0 7½
	Police ... ..	.....	45 13 6½
	Medical	0 11 8	297 0 5½
	Jails	53 2 0	491 10 11½
	Sale of Books, &c. ... ..	.....	21 11 9½
	Miscellaneous ... ..	.....	.....
	Total ...	79 5 8	2313 6 5½
Transfer Items of Account.	Deposits and repayments of Advances and Loans	17,494 0 10	32,222 7 10½
	Bills and Cash Remittances ... ..	.....	12,766 7 3½
	Pension Fund receipts	50 19 5½	10 7 2½
	Local Funds	214 16 7½	11,153 0 3½
	Total ...	17,739 16 11	56,152 2 8½
	Grand Total ...	117,829 1 0½	230,470 5 9
		8237 5 11½	7975 4 11½

1832-33 and 1878-79.

Chapter X.
Revenue and
Finance.Balance Sheet,
1832-33 & 1878-79.

CHARGES.

Head.	1832-33.	1878-79.
	£ s. d.	£ s. d.
Land Revenue	11,157 5 7½	33,665 13 5½
Stamps	337 4 8	865 6 0½
Excise	29 9 11	294 10 5½
Law and Justice. { Civil	10,434 10 8½	12,063 4 8½
{ Criminal	442 3 11	5270 9 2
Forests	...	1161 1 5½
Assessed Taxes	...	...
Allowances and Assignments... ..	4582 3 2½	9654 10 1½
Pensions to Government Servants	7890 1 3½	7109 18 11½
Ecclesiastical	5251 12 5	4869 9 8½
Profit and Loss	18 18 4½	167 4 0
Miscellaneous	33 4 2½	...
	0 14 6½	648 2 11
Total ..	31,741 2 10½	67,312 19 6½
	8237 5 11½	7975 4 11½
Customs	...	0 0 6
Salt	12 11 2½	3526 8 1½
Public Works	359 3 4½	16,778 8 5½
Military	57,443 6 3½	46,190 3 7½
Mint	...	32 1 7
Post	336 8 3	4538 8 9½
Telegraph	...	347 9 10½
Total ..	58,151 3 1	71,403 0 11½
Registration	...	738 16 8½
Education	121 0 0	1655 19 3½
Police	65 12 0	11,247 12 0½
Medical	1748 18 9	2886 3 6½
Jails	27 1 4	2975 16 11½
Cemeteries, Office rents, &c	6 0 0	17 6 0
Printing	...	46 0 4½
Miscellaneous	...	...
Public Works	...	...
Total ..	1981 12 7	18,655 14 10½
Deposits returned and Advances and Loans made	22,915 3 10½	31,232 19 5½
Bills and Cash Remittances	12,519 19 0½	6653 9 3
Interest on Government Securities	...	111 2 11
Local Funds	82 4 0	10,733 4 8½
Total ..	35,517 6 10½	49,990 16 3½
Grand Total ..	135,628 11 4½	208,762 11 8
	8237 5 11½	7975 4 11½

Chapter X.

Revenue and
Finance.

Local Funds.

Revenue other than Imperial.

The district local funds collected since 1865 to promote rural education and supply roads, water, drains, rest-houses, dispensaries, and other useful objects, amounted in 1878-79 to a total sum of ₹99,300 (Rs. 99,300); the expenditure during the same year was ₹10,733 (Rs. 1,07,330). This revenue is drawn from three sources, a special cess of one-sixteenth in addition to the land tax, the proceeds of certain local funds, and some miscellaneous items of revenue. The special land cess, of which two-thirds are set apart as a road fund and the rest as a school fund, yielded in 1878-79 a revenue of ₹6245 (Rs. 62,450). Smaller heads, including a ferry fund, a cattle pound fund, a travellers' bungalow fund, and a school fee fund, yielded ₹1691 (Rs. 16,910). Government and private subscriptions amounted to ₹1854 (Rs. 18,540), and miscellaneous receipts, including certain items of land revenue, to ₹141 (Rs. 1410). This revenue is administered by committees composed partly of official and partly of private members.

For administrative purposes the local funds of the district are divided into two main sections, one set apart for public works and the other for instruction. The 1878-79 receipts and disbursements under these two heads were as follows :

RATNAGIRI LOCAL FUNDS, 1878-79.

Public Works.

RECEIPTS.		CHARGES.	
	£ s.		£ s.
Balance, 1st April 1878 ..	743 8	Establishment	816 15
Two-thirds of the Land Cess ..	4155 8	New Works	1432 17
Road Tolls	145 0	Repairs	2019 18
Ferries	874 16	Medical Charges	650 14
Cattle-pounds	112 12	Miscellaneous	150 6
Travellers' Rest-houses	16 1	Balance, 31st March 1879 ..	164 18
Contributions	269 5		
Miscellaneous... ..	159 18		
Total ..	6435 8	Total ..	6435 8

Instruction.

	£ s.		£ s.
Balance, 1st April 1878 ..	459 2	School Charges	3734 1
One-third of the Land Cess ..	2089 13	Scholarships	89 17
School-fee Fund ..	744 8	School-houses, new	356 2
Contributions (Government) ..	1489 8	Ditto repairs	177 19
Ditto (Private) ..	104 6	Miscellaneous	104 15
Miscellaneous	8 14	Balance, 31st March 1879 ...	234 17
Interest on funded investment ..	2 0		
Total ..	4697 11	Total ..	4697 11

Since 1865 the following local fund works have been carried out. To improve communication, 670 miles of road have been either made, cleared, or repaired, and planted with trees. To improve the water supply, 107 wells, thirty-six ponds, and fifty-one water-courses have been made or repaired. To help village instruction, forty-eight schools, and for the comfort of travellers, sixty-four rest-houses,

dharmshálas, have been either built or repaired. Besides these works, one dispensary, sixty cattle pounds, and two staging bungalows have been constructed, and at the towns of Chiplun, Rájápur, Vengurla, and Ratnágiri, with the help of the municipalities, telegraph and water works have been undertaken.¹

Since 1875 four municipalities have been established. In 1878-79 the total municipal revenue amounted to £2002 (Rs. 20,020). Of this, £1498 (Rs. 14,980) were recovered from octroi dues, £281 (Rs. 2810) from house tax, £17 (Rs. 170) from toll and wheel taxes, and £206 (Rs. 2060) from miscellaneous sources. Under the provisions of the Bombay District Municipal Act (VI. of 1873), the four municipalities of Vengurla, Rájápur, Ratnágiri, and Chiplun are town municipalities administered by a body of commissioners with the Collector as president, and the assistant or deputy collector in charge of the sub-division as vice-president.

The following statement gives for each municipality the receipts, charges, and incidence of taxation during the year ending 31st March 1879:

Ratnágiri Municipal Details, 1878-79.

NAME.	When established.	Popula- tion.	RECEIPTS.					
			Octroi.	House- tax.	Tolls and Wheel Tax.	Assessed Taxes	Miscel- laneous.	Total.
			£ s	£ s.	£ s.		£ s.	£ s.
Vengurla ..	1st April 1878	9000	727 5	63 11	17 5	..	40 6	848 7
Rájápur ..	Ditto	8207	364 6	107 14	..	...	135 18	607 18
Ratnágiri ..	Ditto	15,000		51 1	..	...	4 8	55 9
Chiplun ..	Ditto	5341	406 6	58 15	..	...	25 9	490 10
Total		...	1497 17	281 1	17 5		206 1	2002 4

NAME.		CHARGES.								INCIDENCE.
		Staff.	Safety.	Health	Instruc- tion.	WORKS.		Miscel- laneous	Total.	
						Original.	Repairs			
		£ s	£ s.	£ s.	£ s.	£ s.	£ s.	£ s.	£ s.	£ s d.
Vengurla	...	110 9	62 13	69 7	7 10	931 13	13 18	52 9	1307 19	0 1 10
Rajapur		146 2	38 4	437 11	11 10		12 2	61 18	707 7	0 1 5
Ratnagiri			31 8			10 1	1 13	0 17	43 19	0 0 0
Chiplun		69 6	13 17	135 0	74 3	65 19	81 3	9 11	448 19	0 1 10
Total		325 17	148 2	641 18	93 3	1067 13	108 16	124 15	2508 4	0 1 0

¹ Details of these water works are given in the accounts of the different towns ; see below, "Places of Interest".

CHAPTER XI.

INSTRUCTION.

Chapter XI.**Instruction.**Schools,
1878-79.

IN 1878-79, there were 119 Government schools, or one school for every eleven inhabited villages, with 8247 names on the rolls, and an average attendance of 6287 pupils, or 1·16 per cent of 541,142, the entire population of not more than twenty years of age.

Cost

Excluding superintendence, the total expenditure on these schools amounted in 1878-79 to £4627 (Rs. 46,270). Except the Ratnágiri high school, a purely Government institution, all were local fund vernacular schools. No private school obtained a Government grant.

Staff.

Under the Director of Public Instruction and the educational inspector, central division, the schooling of the district was, in 1878-79, conducted by a local staff 329 strong. Of these, one was a deputy inspector, with general charge over all the schools of the district drawing a yearly pay of £180 (Rs. 1800); one was an assistant deputy inspector drawing a yearly pay of £60 (Rs. 600); and the rest were masters and assistant masters of schools with yearly salaries ranging from £6 to £120 (Rs. 60-Rs. 1200).

Instruction.

Of 119 Government schools, in 114 Maráthi only was taught and in four Urdu. The remaining school was a high school teaching English, Maráthi, and Sanskrit up to the Bombay University entrance standard. Of the vernacular schools, four were for girls and the rest for boys.

Private
Schools.

Besides the Government schools, there are (1879) five registered and 292 unregistered private vernacular schools. Before the introduction of Government education every large village had one or more private schools taught either by Shenvis or Konkanasth Brahmáns. In 1856 there were in all 204 schools of this sort with a nominal attendance of 3869 pupils, 1029 of them Bráhmans, 952 Musalmáns, 550 Maráthás, 119 Bhandáris, two Mhárs, and the rest of other castes. The masters of the present private schools, who are not generally a very high class of men, keep them open only so long as they pay, at times closing them when they have other business in hand. The fees, paid in money or grain, amount to a yearly sum of from £2 10s. to £11 (Rs. 25 - Rs. 140). Every boy on first entering worships Sarasvati the goddess of learning, giving the master a cocoanut, one *sher* of rice, two or three betelnuts, and from 6d. to 2s. (4 *as.* - Re. 1) in cash. On the eleventh day, *ekádashi*, of every fortnight the master gets 2d. (one pice) from each of his pupils, and certain extra fees at different stages in their progress. Besides to

Modi or current Maráthi writing and reading, great attention is paid to teaching mental arithmetic. In the morning devotional songs, *bhupáralis*, and in the evening verses in honour of Ganpati and Sarasvati, and the multiplication tables are shouted out by all the boys at the same time. The schools are held in village temples or on the verandah of the master's dwelling.

The following figures show the increased means for learning to read and write offered by Government to the people of the district during the last fifty-five years. In 1824, besides private schools in large and populous villages, there were three Government schools, one at Ratnágiri with 146 pupils, one at Nandivra with forty-four pupils, and one at Chiplun with thirty-two pupils. In the private schools, 5080 children, including five girls, were being taught the rudiments of learning. Of 5302, the total number of pupils, 1354 or 25·5 per cent were Bráhmans. As already noticed (page 135), between 1822 and 1828 the Scotch missionaries at Bánkot had as many as seventy-nine schools and 3219 scholars, 300 of them girls. In 1845 the first English school was started by Government at Ratnágiri. In 1853 the Board of Education, besides the English school at Ratnágiri with forty-six pupils on the rolls, maintained eighteen vernacular schools with 842 pupils. In 1855-56 there were in all twenty Government schools with 2403 names on the rolls. The English school at Ratnágiri was made a high school in 1862. In 1865 the number of Government schools had risen to seventy-one, with 5006 names on the rolls, and an average attendance of 3782 pupils. Of these, besides the high school at Ratnágiri, eight were second grade Anglo-vernacular schools, two at Ratnágiri and one each in the towns of Vengurla, Chiplun, Dáhol, Málvan, Rájápur, and Dapoli. In 1875-76, including the high school at Ratnágiri, there were 140 schools with 8568 names on the rolls and an average attendance of 6454 pupils. At present, 1878-79, as the Anglo-vernacular and some other schools have been abolished, there are only 119 schools with 8247 names on the rolls and an average attendance of 6287 pupils, or on the basis of the 1872 census 1·16 per cent of 541,142, the total population of not more than twenty years of age.

Before the establishment of girls' schools, a few girls used to attend private schools. The first girls' school was opened at Ratnágiri in 1865, with twenty-five names on the roll. In 1873-74 there were four girls' schools, one at Ratnágiri, two in Málvan, and one in Dapoli, with 161 names on the rolls and an average attendance of 112 pupils. At present there are four Government girls' schools at Ratnágiri, Málvan, Vengurla, and Kelshi, with 221 names on the rolls and an average daily attendance of 145 pupils. Besides these, a girls' school, lately opened by a missionary lady in Ratnágiri, is attended by about twenty-five pupils.

The 1872 census returns give, for the two chief races of the district, the following proportion of persons able to read and write. Of 187,661, the total Hindu male population of not more than twelve years of age, 10,268 or 5·47 per cent; of 62,751 above twelve

Chapter XI. Instruction.

Private
Schools.

Progress,
1824-1879.

Girls' Schools.

Readers and
Writers.
Hindus.

Chapter XI.**Instruction.**Readers and
Writers.*Hindus.*

and not more than twenty years 7005 or 11·30 per cent; and of 203,307 above twenty years, 2062 or 1·01 per cent were able to read and write, or were under instruction. Of 176,507 the total Hindu female population of not more than twelve years of age, 93 or 0·05 per cent; of 72,470 above twelve and not more than twenty years, 25; and of 238,353, above twenty years, 30 were able to read and write, or were being taught.

Musalmán.

Of 15,729 the total Musalmán male population of not more than twelve years of age, 1185 or 7·53 per cent; of 4331 above twelve and not more than twenty years, 468 or 10·79 per cent; and of 15,597 above twenty years, 1625 or 10·41 per cent were able to read and write, or were being taught. Of 14,422 the total Musalmán female population of not more than twelve years, 10; of 5534 above twelve and not more than twenty years, 3; and of 19,218 above twenty years, 21 were able to read and write, or were being taught.

Pupils by
Race.

PUPILS BY RACE, 1865-1879.					
Race	1865-66	Percent- age.	1878-79.	Percent- age.	Increase.
Hindus	4896	84	7884	83	01
Musalmán	103	22	349	46	24
Total	4999	80	8233	81	6·01

according to race and religion. The statement¹ given in the margin shows that of the two chief races, Hindus have a larger proportion of their boys and girls under instruction.

Pupils by
Caste.

Of 8247, the total number of pupils in Government schools at the end of March 1879, there were 3942 or 47·79 per cent Bráhmans; 329 or 3·9 per cent Kshatris including ninety-nine Káyasth Prabhus, and others; 780 or 9·45 per cent trading castes, including seventy-eight Lingáyats, fourteen Jains, and others; 1178 or 14·28 per cent cultivators; 190 or 5·9 per cent artisans; 118 labourers and menial servants; two low castes; and 946 or 11·4 'Other Hindus'; 349 or 4·23 per cent Musalmáns; thirteen Christians; and one Jew. Mhárs and other low caste boys sit in the school house verandah, while Khárvís are allowed to sit with the other boys. Of 221 the total number of girls enrolled in 1878-79 in the four girls' schools 218 or 98·65 per cent were Hindus; and three or 1·35 per cent were Musalmáns.

Schools.
1865-1879.

The following table, prepared from special returns furnished by the Education department, shows in detail the number of schools and pupils with their cost to Government.

¹ The census of 1846 gives 577,984 Hindus and 45,822 Musalmáns. The census of 1872 gives 941,049 Hindus and 71,834 Musalmáns. On the basis of these figures the population and percentage figures for 1866 and 1878 have been calculated.

Ratnágiri School Return, 1855-56, 1865-66, and 1878-79.

CLASS	PEPUS.										AVERAGE DAILY ATTENDANCE.
	SCHOOLS.			Hindus.		Musalmáns.		Parsis.		Total.	
	1855-56.	1865-66.	1878-79.	1855-56.	1878-79.	1855-56.	1878-79.	1855-56.	1878-79.	1865-66.	1855-56.
<i>Government.</i>											
Hugh School	1	1	1	150	161	1	6			182	186
Anglo-Vernacular	8	8	114	1313	7565	24	310	6		1161	877
Vernacular { Boys	19	61	4	3530	218	78	3	1		3608	2701
Vernacular { Girls	...	1	...	25	...	...	...	...		25	19
<i>Private Inspected.</i>											
Vernacular { Boys	...	...	...	...	...	...	...	...		...	...
Vernacular { Girls	...	...	...	...	...	...	...	...		...	...
Total	20	71	119	2356	7884	103	349	1	7	5906	3782
										1076	62875

Add 13 Christians and 1 Jew to make up the total.

CLASS	FEE.	COST OF PUPIL.				RECEIPTS.			
		1855-56.		1878-79.		Government.		Local Chrs.	
		1855-56.	1878-79.	1855-56.	1878-79.	1855-56.	1878-79.	1855-56.	1878-79.
<i>Government.</i>									
Hugh School	2s.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.
Anglo-Vernacular	1s.	4 1 0½	5 8 10½	...	854 9½ 1	857 17 5	...	...	...
Vernacular { Boys	1½d.	0 6 9½	0 17 4	...	519 14 8	1343 13 2½	...	...	...
Vernacular { Girls	None.	...	1 13 9½	...	1479 12 3	145 14 5½	...	2034 18 0	9 0 0
<i>Private Inspected.</i>									
Vernacular { Boys	...	...	0 13 5½	...	...	385 18 4½	...	...	...
Vernacular { Girls	...	...	1 6 9½	...	...	53 10 8½	...	...	...

Chapter XI.
Instruction.Schools,
1855-1879.

Chapter XI.
Instruction.Schools,
1855-1879.*Ratanigiri School Return, 1855-56, 1865-66, and 1878-79—continued.*

CLASS		RECEIPTS—continued.									
		Private.			Fees.			Total.			
		1855-56.	1865-66.	1878-79.	1855-56.	1865-66.	1878-79.	1855-56.	1865-66.	1878-79.	
		£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	
<i>Government</i>											
High School		..	47 17 6	2 5 0	35 17 3	204 19 6	249 1 9½	187 17 3	1050 8 7½	1108 4 2½	
Anglo-Vernacular	{ Boys	6 0 0	181 1 6	95 5 10½	147 14 9	212 14 3½	..	598 19 3	780 6 6½	4027 5 6½	
Vernacular	{ Girls	..	10 7 0	2 0 0	..	467 12 5½	514 8 5½	..	2138 6 2½	137 14 ½	
<i>Private Inspected</i>											
Vernacular	{ Boys	..	..	3 11 3	..	..	132 19 6	..	..	954 0 9¼	
	{ Girls	..	..	..	..	..	..	..	..	63 10 8½	
CLASS		EXPENDITURE									
		Instruction			Buildings.			Libraries.			
		1855-56.	1865-66.	1878-79.	1855-56.	1865-66.	1878-79.	1855-56.	1865-66.	1878-79.	
		£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	
<i>Government</i>											
High School		158 0 0	928 13 9	1034 18 8½	..	50 13 10½	..	..	..	34 17 6	
Anglo-Vernacular		554 16 5½	622 11 9½	3492 3 9½	..	130 6 10	538 1 6	..	..	..	
Vernacular	{ Boys	..	1458 14 2½	146 11 10½	..	514 2 3	2 19 8½	..	..	..	
	{ Girls	..	30 5 7½	..	..	..	..	..	..	..	
<i>Private Inspected</i>											
Vernacular	{ Boys	..	..	821 2 4½	..	..	..	..	..	..	
	{ Girls	..	..	53 10 8½	..	..	..	..	..	..	

Ratnagiri School Return, 1855-56, 1865-66, and 1878-79—continued.

Chapter XI.

Instruction.

Schools,
1855-1879.

[illegible]

Chapter XI. Instruction.

Town Education.

A comparison of the present (1878-79) provision for teaching the town and country population gives the following results. In the town of Ratnágiri there are four Government schools, with, out of 613 names on the rolls, an average attendance of 475 pupils. Of these schools, one is a High school and three vernacular schools, two for boys and one for girls. The first English school in Ratnágiri was opened on the 1st April 1845. Seventeen years later (25th September 1862) it was raised to the rank of a high school. The staff is a head master, eight assistants, and a *shástri* or Sanskrit teacher. The subjects taught are English, Sanskrit, Maráthi, history and geography, pure mathematics, and natural science. Special success has attended the study of Sanskrit as shown by the number of Ratnágiri students who have won the Jagannáth Shankar Shet Scholarships at the Bombay University. Between 1865 and 1879, 192 students passed the Bombay University entrance examination.¹ The number of boys in the school in January 1880 was 166 of whom a large majority were Chitpávan Bráhmans.² The boys are mostly of poor physique and constitution; but they are hardworking, well behaved, and as might be expected from their class, highly intelligent. A gymnasium attached to the school is presided over by a professional gymnast. Many of the boys gain a degree of skill in the various athletic exercises which are taught in the intervals of study. The number of pupils in the high school has of late years steadily declined. The causes assigned are the opening of other high schools in the Southern Marátha country, poverty, the raising of school fees, and the diminished value of English education. The three vernacular schools, two for boys and one for girls, are all provided with convenient school houses. The boys' school in which the teaching is most elementary, had on the 1st April 1879, 189 scholars on the roll, of whom 66 were Bráhmans, 109 other Hindus, 13 Muhammadans, and one a Portuguese. The other boys' school for more advanced boys, had (1st April 1879) 195 scholars on the roll, of whom 132 were Bráhmans, 57 other Hindus, 4 Muhammadans, and 2 Portuguese. The girls' school had (1st April 1879) 61 pupils on the roll, of whom 20 were Bráhmans, and the rest other Hindus. The attendance is irregular and the girls leave the school at too early an age to make any real progress. The age of the girls is from six to ten and the utmost they can learn during their short term of school life is a little reading, writing, simple arithmetic, and plain needlework. No admission or monthly fee is charged and free books and slates are provided. Notwithstanding these and other encouragements the institution, though of many years' standing, has never had much success.

Vernacular Schools.

School of Industry.

A school of industry was established on the 1st of April 1879, the local funds committee purchasing from the proprietors the buildings, workshops, plant, and machinery of the old Ratnágiri Steam Saw

¹ The details are : 1865, 4 ; 1866, 9 ; 1867, 8 ; 1868, 22 ; 1869, 13 ; 1870, 13 ; 1871, 18 ; 1872, 24 ; 1873, 18 ; 1874, 15 ; 1875, 13 ; 1876, 8 ; 1877, 9 ; 1878, 5 ; and 1879, 13.

² Of the total of 166, 138 were Bráhmans, 20 other Hindus, 7 Muhammadans, and one a Christian.

Mills Company.¹ The general permanent establishment of the school consists of a superintendent, a head master, a clerk and accountant, a storekeeper, a timekeeper, and an overseer. The saw mills and workshop establishment consists of one saw mill overseer, *mestri*, one head and one assistant carpenter and machine overseer, one boys' overseer, one fitting tool overseer, three carpenters, one saw sharpener, three saw tenders, and two belting tenders and oilmen. For the engine and boiler house a further establishment of one engine tender, two firemen and a boy is maintained. The total monthly cost of this fixed establishment is about £50 (Rs. 500). Extra hands, carpenters, smiths, and other workmen are taken on from time to time according to the work on hand. The scholars are of all ages from seven to fifteen. After a month's probation, they are paid, according to the value of their work, from 2s. to 16s. (Re. 1 - Rs. 8) a month. Their parents are not required to enter into any bond or agreement. The school hours are for reading and writing from 7 A.M. to 9 A.M.; from 9 A.M. to 11 A.M. in the workshop; from 11 A.M. to 1 P.M. meals and recreation; from 1 P.M. to 4 P.M. in the workshop; from 4 to 5 P.M. arithmetic and mensuration. The boys are taught in succession the use of the simpler carpenter's tools, hand planing, and making mortices and tenons. As soon as they are proficient in this and in the square and foot rules, they are taught the use of fitting tools, circular saws, tenoning and morticing machines, fret and vertical saws, drilling machines, saw sharpeners, and lathes. As the boys become more advanced, they are taught practical mensuration by lining out with chalk on the floor full sized plans of roofing, scantling, door and window frames, and other similar work. To this follows instruction in taking out quantities and making estimates, and lastly the drawing of designs and the working of the steam engine.² The number of pupils on the opening of the school on the 1st April 1879 was 37. Six months later (1st October) the number had risen to 45. The boys are of various castes, Bráhmans, carpenters, blacksmiths, Vánis, Bhandáris, Maráthás, Shindás, Kunbis, and Gábits being represented as well as Musalmáns.

Besides these Government institutions there are eleven private or indigenous schools. . . Of these one was a English school teaching to the third standard, four gave instruction in Maráthi, three in Hindustáni and Arabic, two were Missionary vernacular schools one for boys and one for girls, and one was a Veda school. The attendance at the Maráthi schools varies from forty to thirty-five, while the Muhammadan schools each attract about twenty boys who are taught little else but to read the Kurán.

The American mission boys' school has an excellent house and is attended by about sixty pupils. Their girls' school, attended by about twenty-five pupils, has no special building.

Chapter XI. Instruction.

School of
Industry.

Private
Schools.

Mission
Schools.

¹ A more detailed history of this institution will be found in Chap. VI. p. 159.
² Collector's 509, 17th February 1879.

Chapter XI.
Instruction.
Vedic School.

In 1867 a Vedic school, *Veda shāla*, was started and continues to flourish with an attendance of about fourteen pupils. The scholars, usually the sons of mendicant, *bhikshuk*, Brāhmins, are supported by the members of the school committee. The funds, which are increasing, amount to £200 (Rs. 2000) ; a school house has been built and the teacher, *guru*, is paid a yearly salary of £10 (Rs. 100). The instruction is limited to the mere recital of the Vedas and the incantations, *mantras*, repeated at Hindu rites and ceremonies. No attempt at explanation or translation is made.

Town
Education.

In Málvan there were in 1878-79 three Government vernacular schools, with a roll call of 385 names and an average attendance of 310. Of these schools two were for boys and one for girls. The average yearly cost of each pupil in the boys' schools was 9s. 2½d. (Rs. 4-9-6), and in the girls' school 13s. 5¾d. (Rs. 6-11-7). In Vengurla there were in 1878-79 three Government vernacular schools, with 313 names on the rolls and an average attendance of 230. Of these two were for boys and one for girls. The average yearly cost of each pupil in the boys' schools was 8s. 5d. (Rs. 4-3-4), and in the girls' school 12s. 10d. (Rs. 6-6-8). In Masura there was in 1878-79 one Government vernacular school for boys, with 108 names on the school books and 77·5 in average attendance. The average yearly cost of each pupil was 9s. 7¼d. (Rs. 4-13-2). In Chiplun there was in 1878-79 one Government vernacular school. The number on the rolls was 153, the average attendance 114, and the yearly cost of each pupil 8s. 5½d. (Rs. 4-3-5). In Harnai there was in 1878-79 one Government vernacular school, with 107 names on the rolls, an average attendance of ninety, and an average yearly cost of each pupil of 8s. 4¾d. (Rs. 4-2-11). In Rájápur there were in 1878-79 two schools for boys, with a total roll call of 196 names and an average attendance of 139. Hindustáni was taught in one school and Maráthi in the other. The average yearly cost of each pupil in the Hindustáni school was 14s. 4¾d. (Rs. 7-3-1), and in the Maráthi school 10s. 7½d. (Rs. 5-5-0).

Village
Education.

Exclusive of the seven towns of Ratnágiri, Málvan, Vengurla, Masura, Chiplun, Harnai, and Rájápur, the district of Ratnágiri was in 1878-79 provided with 103 schools, or on an average one school for every twelve inhabited villages.

The following statement shows the distribution of these schools by sub-divisions :

Ratnágiri Village Schools, 1878.

SUB-DIVISIONS.	Villages	Popula- tion	Schools.		SUB-DIVISIONS.	Villages	Popula- tion	Schools.	
			Boys	Girls				Boys	Girls
Dapoli ...	242	136,944	16	1	Dapoli ...	120	124,115	9	...
K'at ...	146	89,647	6	...	Málvan ...	60	66,952	7	...
Chiplun ...	211	158,882	14	...	Vengurla ...	9	20,092	4	...
Sonamashvar ...	173	167,891	13	...					
Ratnágiri ...	179	118,662	23	...					
Rampur ...	161	141,179	10	...					
					Total	1287	954,631	102	1

Libraries

There are libraries and reading rooms at six places, Chiplun, Dápoli, Málvan, Rájápur, Ratnágiri, and Vengurla. Only the

Ratnágiri and Vengurla libraries have special buildings. The rest are lodged in Government rooms, schools, or offices. A few of the leading vernacular papers and magazines are found on the library tables, and the number of books varies from fifty to 725. Nearly ninety members support the Vengurla library. In other places the number varies from five to thirty-five. Except at Ratnágiri and Vengurla where they nearly amount to £30 (Rs. 300), the yearly receipts generally vary from £2 to £10 (Rs. 20-100).

Three Maráthi weekly lithographed newspapers are published, two the *Jaganmitra* 'Friend of the World' and *Satyashodhak* 'Truth Seeker' in the town of Ratnágiri, and one, the *Málvan Samákhár* and *Vengurla Vritt* 'Málvan and Vengurla News' in Vengurla. The *Jaganmitra* is an old paper of some standing. The rest are very ordinary prints. A small monthly Maráthi magazine called *Vidyámála* 'Garland of Knowledge' is also published in the town of Ratnágiri.

Chapter XI.**Instruction.**

Libraries.

Newspapers.

CHAPTER XII.

HEALTH.

Chapter XII.

Health.

Diseases.

Fever.

INTERMITTENT fever, the prevailing disease, is commonest in July, August, and September. The lower classes, with scanty and poor food and much exposure to rain, suffer severely from fever. Some years ago Bámkot was so feverish that the mahálkari's office had to be moved to Mandaugad. Of late, without any apparent cause, the climate has become more healthy.

Leprosy.

Leprosy is commoner than elsewhere, especially in the inland parts of the centre and north. In 1871 there were more than 1600 lepers, or one to every 636 of the population and five for every four villages. More than one-third were bad cases with mutilation of hands and feet. The proportion of male to female sufferers was four to one. Their ages, especially among the females, were advanced, and there were few leper children. Musalmán lepers are very few, while among Hindus, the chief classes are Marátha and Kunbi cultivators, and next to them Mhárs. Heredity is more marked than usual.¹

Cholera.

Cholera rages every year more or less severely in some part of the district. The epidemics of 1820 and 1837 are mentioned as specially wide-spread and fatal. In 1869, 1871, and 1872 there were serious outbreaks at Vengurla. Except in 1877, the town of Ratnágiri has enjoyed a remarkable freedom from cholera.

Small-pox.

Small-pox is very common in the town of Ratnágiri. Both in 1871 and 1872, the disease was of a very deadly type.

Dysentery.

During the rainy season dysentery is very fatal. In 1873, there were 257 deaths in Vengurla and Málvan.

Especially in the south of the district the people suffer much from bilious attacks which often take the form of intermittent fever and cholera biliosa. Disease of the nervous system, showing itself in mental aberration and paralytic affections, is a not uncommon result of the habitual use of narcotic drugs, *kuchli*, *Strychnos nux. vomica*, thorn-apple, *dhotra*, *Datura huminata*, and a coarse kind of spirit called *pheni* distilled from toddy. Itch and other forms of skin disease are common along the coast. Scurvy, sometimes observed among prisoners, presents symptoms somewhat different from those of the sea scurvy.

Worms.

Worms is a very general disease. They are passed in large numbers both by young and grown-up persons.

¹ Surgeon R. V. Carter, M.D. Trans. Med. and Phys. Soc. Bom. XI, 162-167

The district is ill supplied with hospitals and dispensaries. There are only three civil hospitals at Ratnágiri, Dápoli, and Vengurla camp. In 1878, there were in all 9655 treated in the three hospitals, 283 of them in-door and 9372 out-door patients. The total amount spent in checking disease in the same year was £2510-1-4 (Rs. 25,100-10-8). The following working details are taken from the 1878 hospital reports.

The Ratnágiri civil hospital, originally built and used as a criminal jail, is some distance from the town. It is well built and airy, and has room for forty patients. It has one large ward for men, and smaller wards for women and for insanes. Additional accommodation is much needed. There are no quarters for servants, and those for the hospital assistant and medical pupil are badly placed. In 1878, 166 in-patients and 2828 out-patients were treated, most of them for malarious fevers and bowel affections. There were seven deaths chiefly from injuries. Seven major and fifty-seven minor surgical operations were performed. The total cost of the institution amounted to £1090-4-9 (Rs. 10,902-6-0) or 7*s.* 2½*d.* (Rs. 3-9-9) a patient.

The Dápoli civil hospital, established in 1860, has a building of its own, formerly the storeroom for the arms and ammunition of the Veteran Battalion. Well situated in the centre of the camp, it has but one ward with eight beds and no separate compartment for women. In 1878, the chief diseases were malarious fevers, respiratory affections, diarrhoea, and skin diseases. The total treated in the year were twenty-eight in-door and 2715 out-door patients. There were sixty-five successful vaccinations. The cost of the hospital was £844-11-5½ (Rs. 8445-11-9) or 6*s.* 2*d.* (Rs. 3-1-4) a patient.

The Vengurla civil hospital has a building of its own, a massive structure supposed to have been raised by the Portuguese or Dutch. It has two wards with ten cots and two end rooms, one used as an office and store, the other as an operating room. The roof is tiled and the floor stone-paved. There is a good plinth and sufficient ventilation. Except during the last two years, 1877 and 1878, the attendance has been very meagre with generally not more than two in-patients and twenty-nine out-patients. During the last two years, from the prevalence of malarious fevers, attendance has considerably increased. In 1878, the chief diseases were malarious fevers, rheumatism, respiratory affections, and skin diseases. The total treated were eighty-nine in-patients and 3329 out-patients. Nine deaths occurred among the in-patients due to bowel diseases and injuries. There were sixty-eight successful vaccinations. The cost of the hospital was £575 5*s.* 1¼*d.* (Rs. 5752-8-10) or 2*s.* 11¼*d.* (Rs. 1-7-5) a patient.

The Ratnágiri leper hospital, established in 1875, has buildings costing about £2700 (Rs. 27,000) and with room for 100 patients. They stand about two miles from the station on an isolated part of the rocky eastern table-land. Most of the funds were provided by the liberality of Mr. Dinsha Mánikji Pooni, a Parsa gentleman of

Chapter XII. Health.

Civil Hospitals,
1878.

Ratnágiri.

Dápoli.

Vengurla.

Leper Hospital.

Chapter XII.**Health.****Lepor Hospital.**

Bombay, whose name the institution bears. The balance was met from the district local funds supplemented by minor popular contributions. The hospital is maintained by a yearly grant of £250 (Rs. 2500) from Government and £200 (Rs. 2000) from the district local funds. There is a resident hospital assistant and the civil surgeon of the station, in whose charge the institution is, visits it three times a week. The general affairs of the hospital are managed by a local committee of which the Collector is ex-officio president. The number of patients varies considerably, being always greater during the rainy months (June to October).

Practitioners.*Vaidyās.*

Native medical practitioners, *Vaidyās*, whose number is on the decrease, use a variety of seeds, roots, barks, and leaves in the cure of disease. They are somewhat partial to counter irritants, using for this purpose especially the acrid juice found under the cuticle of the cashewnut. They frequently have recourse to the actual cautery scoring with no tender hand the integuments both of man and beast. The acrid juice of cashew, mixed with molasses, *gul*, is also prescribed internally for worms. Hemp seed, opium, and green tobacco are generally administered in cases of dysentery. Chunam plaster is considered a specific for headaches of all sorts, and chillies and *nux vomica* for cholera. Senna leaves and castor oil are used as purgatives, while water and salt is their only emetic. Small doses of opium are frequently administered to enable children to sleep quietly at night. They admit the efficacy of quinine and some other English medicines, and recommend vaccination.¹

Cattle Diseases.

The cattle foot disease is prevalent in the rainy season in most villages of the Ratnágiri, Dápoli, Rájápur, and Khed sub-divisions. The animal suffers for two or three days from fever. Saliva flows from its swollen mouth and all appetite is lost. When the fever abates the hoofs swell and then burst out and gangrene. This disease in some cases causes death. In another disease called *pyya*, observed in the hot season, the stomach of the animal swells; and in a third, a rarer and contagious sickness called *bhorya*, the animal turns round and round, refuses to chew the cud, grows weak, and dies within about a week. Some of these diseases and colic and rheumatic affections of the joints, to which cattle are very liable in the rains, are treated by branding with a hot iron. Dysentery among cattle, attributed to an ulcerated condition of the intestines, is said to prevail during epidemics of small-pox. The sharp, bitter, and somewhat astringent seed-pods of the wild balsam, *torda*, *Impatiens balsamina*, are often used in this complaint. In the rains cattle are sometimes stricken with paralysis, *kuksha vāyu*, of the legs, and sheep with rot in the hoof. Domestic poultry are, especially in the hot season, at times infested by small fleas, so worrying and hard to get rid of, that fowls often scratch themselves to death. The best remedy is an ointment of oil and turmeric. Turkeys, when young, are subject to a pustular disease about the head and wattles. This and sudden apoplexy are often fatal.

¹ Bom. Med. and Phys. Soc. Trans. IV 77.

In 1879-80, the work of vaccination was, under the supervision of the Deputy Sanitary Commissioner, Konkan Division, carried on by thirteen vaccinators distributed over the district, with yearly salaries varying from £16 16s. (Rs. 168) to £28 16s. (Rs. 288). The total number of operations was 22,911, besides 3289 re-vaccinations, compared with 22,231 primary vaccinations in 1869-70.

The following abstract shows the sex, religion, and age of the persons vaccinated:

Ratnágiri Vaccination Details, 1869-70 and 1879-80.

YEAR.	PERSONS VACCINATED.									Total
	Sex.		Religion.					Age.		
	Male	Female.	Hindus.	Musal- mans	Pársis.	Chris- tians.	Others.	Under one year.	Above one year	
1869-70 . . .	11,891	10,340	18,668	2099	...	7	1457	1271	17,957	22,231
1879-80 . . .	11,566	11,345	20,168	1077	...	123	1543	10,701	12,210	22,911

The total cost of the operations in 1879-80 was £758 1s. (Rs. 7582) or about 8d. ($5\frac{1}{3}$ as.) for each successful case. The entire charge was made up of the following items: Supervision and inspection £364 2s. (Rs. 3611), establishment £375 12s. (Rs. 3756), and contingencies £18 10s. (Rs. 185). Of these the supervising and inspecting charges were wholly met from Government provincial funds, whilst the other charges were borne by the local funds of the different sub-divisions.

The total number of deaths in the five years ending 1879, as shown in the Sanitary Commissioner's Annual Reports, was 97,552 or an average yearly mortality of 19,511 or, according to the 1872 census, 1.9 per cent of the total population. Of the average number of deaths, 10,642 or 54.45 per cent were returned as due to fevers;¹ 1796 or 9.19 per cent to bowel complaints; 963 or 4.93 per cent to cholera; 534 or 2.73 per cent to small-pox; and 5176 or 26.19 per cent to miscellaneous diseases. Deaths from violence or accidents averaged 132 or 2.21 per cent of the average mortality of the district. During the same period, the number of births was returned at 76,047 souls, 39,552 of them males and 36,495 females, or an average yearly birth-rate of 15,209 souls or, according to the 1872 census, 1.4 per cent of the total population of the district.²

Births and Deaths.

¹ In 1879, there were 19,955 deaths due to fever as compared with 10,667 in the previous year.

² The figures are incorrect; for while the population of the district is increasing, the returns show a birth-rate less by 4334 than the death-rate. The explanation probably is that nearly all the deaths and not nearly all the births are recorded.

CHAPTER XIII.

SUB-DIVISIONS.¹

Chapter XIII.

Sub-divisions.

DÁPOLI.

Da'poli, the northmost of the sub-divisions, is bounded on the north by Janjira and Kolába, on the east partly by Kolába and partly by Khed, on the south by the Váshishti which separates it from Chiplun, and on the west by the sea. Its area is about 500 square miles; its population, according to the 1872 census returns, was 143,137 souls, or 286·16 to the square mile; and in 1878-79 its realizable land revenue was £11,134 (Rs. 1,44,349).

Area.

As the sub-division is not yet fully surveyed area details are not available.

Aspect.

Dápoli, in the extreme north of the district, and separated from the Sahyádrí range by the Khed sub-division, has a seaboard of some thirty miles, stretching from Bánkot to Dábhól. Its breadth varies from fifteen to twenty miles. The coast line differs little in its general character from that of other parts of the Konkan. Bluff headlands flank the mouths of the principal rivers, and in the indentations of the coast are numerous sandy bays and strips of windblown drift. The villages on the coast, which are uniformly situated on the low belts of sand between the sea and the cliffs, and at the estuaries of the rivers, are large and thickly peopled, and as is usual throughout the Konkan seaboard, densely shaded by cocoa palms. At Bánkot and Dábhól the estuaries of the Sávitri and the Váshishti afford good fair-weather ports for moderate sized craft, while at Harnai is fair anchorage during northerly breezes. Several smaller bays at intervals along the coast give shelter to the numerous fishing boats and small craft kept by the seafaring classes. Opposite Harnai, the picturesque island-fort of Suvarndurg, divided from the mainland by a channel about a quarter of a mile broad, is one of the most conspicuous features of the coast.² Passing inland, the general aspect of the sub-division is, especially in the petty division of Mandangad, extremely rugged, though, except Mandangad, there are no hills of any great height. High cliffs rise abruptly from the sea shore, crowned by bare and bleak plateaus, on whose surface the laterite crops out, sometimes in huge boulders, sometimes in flat sheets of blackened weather-beaten rock. Here and there

¹ The paras about aspect, climate, water, and soil have been compiled for Dápoli, Khed, Chiplun, Sanganeshwar, Ratnagiri, Rajpuri, and Devgad by Mr. G. W. Vidal, C.S., and for Malvan and Vengurla by Mr. N. Krishnaray. As the 1872 census figures and the produce returns for 1877-78 are not available for the nine sub-divisions as they are at present constituted, the people and produce figures inserted in this chapter refer to the old sub-divisions.

² Detail are given below, p. 351.

is a level plain, as at the station of Dápoli, where the laterite is less exposed. But for the most part the country consists of a series of irregular hills, scoured and laid bare by innumerable water-courses, and broken at intervals by the deep precipitous ravines through which the larger streams find their way to the sea. Eastwards the country becomes more undulating and less bare, and the valleys and river banks are almost everywhere fairly covered with brushwood. The inland villages are uniformly well shaded with clumps of jack, mango, and other trees, while here and there are found luxuriant groves dedicated to the village temples. Teak grows well in many parts of the sub-division, on the banks of the rivers and in sheltered ravines, and although since the beginning of the century much valuable timber has been cut and removed, there remains on the banks of the Jog river a valuable Government teak reserve, planted nearly two hundred years ago by Kánhoji Ángria.

The climate of Dápoli is on the whole very healthy. Bánkot and other populous villages on the coast used to have a bad name for fever, and on this account the head-quarters of the mahálkari's station had to be moved from Bánkot to Mandangad. Of late years there has been no special sickness, and the fever, from causes as yet imperfectly understood, has almost entirely disappeared both from Bánkot and the neighbouring villages. With this doubtful exception, the rest of the sub-division is free from malarious diseases and epidemics. The climate is temperate; no great extremes of heat and cold are experienced, and in every part of the sub-division the sea breeze is felt all through the hottest months. Dápoli station has long been known as one of the healthiest localities in the Konkan, and as being well suited for a military sanitarium and a residence for Europeans throughout the year. It has an elevation of about 600 feet above the sea, from which it is about five miles distant as the crow flies. The mean annual temperature for the eight years ending 1877-78 was found to be $76^{\circ} 5'$, which is less by about $3^{\circ} 5'$ than that recorded in Ratnágiri.¹ The average rainfall recorded for the ten years ending 1877 was 112·24 inches. For the same period the fall recorded at Mandangad, which has a higher elevation, was 133·41 inches.

The principal rivers are the Sávitrí in the north and the Váshishti in the south. Between them lies the Jog, a smaller river, and several insignificant streams and creeks. Both the Sávitrí and Váshishti are navigable for craft of fair size throughout the section of their course which passes through the sub-division. There are no canals or other large irrigation works. With few exceptions, the cocoanut gardens on the coast, and other crops requiring water are irrigated by wells, fitted with lifts worked by bullock power. Rice lands, except in a very few cases, where

Chapter XIII.

Sub-divisions.

DÁPOLI.

*Aspect.**Climate.**Water.*

¹ In his Meteorology of the Bombay Presidency (p. 164), Mr. Chambers gives the mean annual temperature of Dápoli as $78^{\circ} 5'$ and the range between the greatest and least monthly means as $9^{\circ} 5'$. These results were obtained from observations extending over two years only.

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Sub-divisions.

DÁPOLI.

Water.

summer crops are raised in the beds of dry ponds, depend entirely on the monsoon rainfall.

The supply of drinking water is scanty in many of the large coast villages. The water of most of the wells in use in such places, especially those in or near cocoa palm gardens, is, besides being brackish, more or less tainted with impure subsoil drainage. In the hills above, pure water is usually obtainable at no great distance; but to ensure a constant and sufficient supply, a considerable expenditure is necessary. Inland the supply is, generally speaking, pure and abundant throughout the sub-division, and the Dápoli station is famous for the excellence of its drinking water. Thermal springs occur in two or three places.¹

Soil.

A small proportion of alluvial soil is found on the banks of the rivers and on the flats formed by deposits at their estuaries. A good deal of salt marsh and tidal swamp has been from time to time reclaimed and converted into fertile gardens and rice fields. Elsewhere, throughout the sub-division, on uplands and hill sides the soil consists entirely of crumbled laterite, with here and there towards the eastern boundary, a sprinkling of red and grey trap. The dry-crop soil is everywhere poor and unproductive, requiring constant manuring and long fallows, and yielding only coarse hill grains.

Stock.

According to the 1878-79 agricultural stock returns, there were 10,000 ploughs, 79 carts, 22,000 oxen, 16,200 cows, 7700 buffaloes, 60 horses, and 6273 sheep and goats.

Produce.

Of the 232,127 acres under actual cultivation in 1877-78, grain crops occupied as many as 211,719 acres or 91·208 per cent, 21,935 of them under rice, *blátt*, *Oryza sativa*; 72,110 under *náchni*, Eleusine corocana; 52,994 under *síru*, *Panicum miliaceum*; 56,110 under *harik*, *Paspalum scrobiculatum*; and 10,370 under other grain crops. Pulses occupied 2200 acres or 0·94 per cent, 47 of them under gram, *harbhara*, *Cicer arietinum*; 470 under *tur*, *Cajanus indicus*; 139 under *kulith*, *Dolichos uniflorus*; 230 under *mug*, *Phaseolus radiatus*; 322 under *adil*, *Phaseolus mungo*; and 992 under miscellaneous pulses. Oilseeds occupied 15,720 acres or 6·77 per cent, all of them under gingelly oilseed, *tíl*, *Sesamum indicum*. Fibres occupied 560 acres or 0·24 per cent, 140 of them under brown hemp, *ambádi*, *Hibiscus cannabinus*, and 120 under Bombay hemp, *sau*, *Crotalaria juncea*. Miscellaneous crops occupied 1928 acres or 0·83 per cent, 130 of them under sugarcane, *us*, *Saccharum officinarum*, and 1798 under miscellaneous vegetables and fruits.

People,
1872.

The 1872 census returns show, of a total population of 143,137 souls, 124,380 or 86·89 per cent Hindus; 18,515 or 12·95 per cent Musalmáns; 208 or 0·14 per cent Christians; and 4 Pársis. Statistics specially prepared from the enumerators' returns give the

¹ Details are given above, p. 21.

following caste details : 8598 Bráhmans ; 156 Parbhus, writers ; 1054 Vánis, 566 Gujars, 13 Bhátíás, 11 Márvádís, and 7 Lingáyats, traders and merchants ; 49,563 Kumbis, 19,187 Maráthás, 5619 Bhandáris, 228 Mális, and 74 Gávdás, cultivators ; 1520 Telis, oil-pressers ; 698 Sális, and 77 Koshtis, weavers ; 2153 Kumbhárs, potters ; 1810 Sutárs, carpenters ; 2037 Sonárs, gold and silversmiths ; 475 Kásárs, workers in bell metal ; 83 Lohárs, blacksmiths ; 11 Tábats, braziers and coppersmiths ; 15 Ghisádís, tinkers ; 2 Gaundis, masons ; 793 Shimpis, tailors ; 10 Pátharvats, stone-hewers ; 4 Rangáris, dyers ; 321 Guravs, worshippers and temple servants ; 1007 Nhávis, barbers ; 452 Parits, washermen ; 3593 Gavlis, cowherds ; 113 Dhangars, shepherds ; 3575 Kolis, 1484 Khárvís, 579 Bhois, and 182 Gábits, sailors and fishermen ; 226 Buruds, makers of bamboo and rattan baskets ; 27 Bhádbhunjá, parchers and sellers of parched grain ; 35 Rámoshis, watchmen ; 2 Rajputs, messengers and constables ; 9 Beldárs, stone-cutters ; 1994 Chámhbárs, and 11 Jingars, shoemakers and cobblers ; 14,225 Mhárs, 9 Mángs, and 3 Bhangis, depressed classes ; 296 Kátkaris, catechu-makers, 57 Dongar Kolis, and 13 Thákurs, unsettled tribes ; 486 Saravdás, 181 Jangams, 155 Jogis, 235 Gondhlis, 314 Gosávis, and 32 Gopáls, religious beggars and mendicants. As regards occupation the same return arranges the whole population under the seven following classes : i. Employed under Government or local authorities, 508 ; ii. Professional persons, 669 ; iii. In service or performing personal offices, 2215 ; iv. Engaged in agriculture and with animals, (a) cultivators, 62,933 ; (b) labourers, 1645 ; total, 64,578 ; v. Engaged in commerce and trade, 4848 ; vi. Employed in mechanical arts, manufactures, and engineering operations, and engaged in the sale of articles manufactured or otherwise prepared for consumption, 10,473 ; vii. Miscellaneous persons not classed otherwise, (a) women 11,127 and children 47,159, in all 58,586 ; and (b) miscellaneous persons 1260 ; total 59,846.

Khed, fifteen miles from the coast, is bounded on the north by Kolába, on the east by Sátára, on the south by Chiplun, and on the west by Dápoli, which lies between it and the sea. Its area is about 390 square miles ; its population, according to the 1872 census returns, was 89,647 souls, or 230 to the square mile, and its realizable land revenue in 1878-79 was £9262 (Rs. 92,620).

As the sub-division is not yet fully surveyed area details are not available.

The Khed sub-division lies inland and has no seaboard. It is very rugged and hilly, with a large proportion of rocky and almost barren land. Between Khed and Chiplun, the country is pretty open though undulating, and in the south-west corner of the sub-division there are large plateaus of tolerably level land, but the north-west portion is extremely hilly and much broken by ravines. At the north-east corner lie in succession the three lofty hills of Mahipatgad, Sumárgad, and Rasálgad, detached from the main Sahyádrí range by the deep valley of the Jagbudi river. South of these hills the country is broken in all directions by spurs, ravines, and precipitous defiles.

Chapter XIII. Sub-divisions.

DÁPOLI.
People,
1872.

KHED.

Area.

Aspect.

Chapter XIII.**Sub-divisions.****Khed.***Aspect.*

The principal passes by which the Sahyádrí range is crossed in this sub-division are the Hátlot and the Ámbavli, the latter of which is passable for pack bullocks. Most parts of the country are fairly well covered with brushwood and scrub. Teak is very scarce ; but the *ain*, *Terminalia glabra*, and the *kinjal*, *Terminalia paniculata*, are found, though not in any quantity or of fine growth. The village sites are everywhere well protected by shady trees, and there are numerous sacred groves dedicated to temples scattered over the country and strictly preserved by the village communities.

Climate.

The greater part of the sub-division lies beyond the influence of the sea breeze, and is consequently very hot during March, April, and May. From December to February the nights are chilly, and the daily range of the thermometer is considerable. The average rainfall for the ten years ending 1877 was 130·59 inches.

Water.

The Váshishti river skirts the sub-division on the south-west, while its tributary the Jagbudi flows through the sub-division in an irregular course from its source in the north-eastern corner to its meeting with the Váshishti in the extreme south-west. There are no other streams of any size or importance. The Jagbudi is, for small craft, navigable as far as Khed. There are no irrigational works ; the little garden land is watered almost entirely by wells. In the neighbourhood of Khed the fields on the banks of the Jagbudi are here and there watered by wheel lifts. The supply of drinking water is deficient in the belt of villages lying at the foot of the Sahyádrí range, but is moderately good in other parts of the sub-division. A hot spring is found at Khed.¹

Soil.

A narrow belt of alluvial soil, stretching along the banks of the rivers, yields fair crops of rice and pulse. The rest consists almost entirely of worn-down trap mixed here and there with laterite. On the whole, as regards soil, this sub-division is, with the exception perhaps of Devgad, the poorest in the district.

Stock.

According to the 1878-79 agricultural stock returns, there were 16,362 ploughs, 33 carts, 18,209 oxen, 11,810 cows, 6755 buffaloes, 21 horses, and 2793 sheep and goats.

Produce.

Of the 187,949 acres under actual cultivation in 1877-78, grain crops occupied 184,094 acres or 97·9 per cent, 18,794 of them under rice, *bhát*, *Oryza sativa* ; 34,700 under *náchni*, *Eleusine corocana* ; 17,600 under *síva*, *Panicum miliaceum* ; and 113,000 under *harik*, *Paspalum scrobiculatum*. Pulses occupied 900 acres or 0·47 per cent, 250 of them under *tur*, *Cajanus indicus*, 50 under *mug*, *Phaseolus radiatus*, 100 under *udid*, *Phaseolus mungo*, and 500 under miscellaneous pulses. Oilseeds occupied 625 acres or 0·33 per cent, all of them under gingelly oilseed, *tíl*, *Sesamum indicum*. Fibres occupied 2291 acres or 1·21 per cent, 355 of them under brown hemp, *ambáli*, *Hibiscus cannabinus*, and 1936 under Bombay hemp, *san*, *Crotalaria juncea*. Miscellaneous vegetables and fruits occupied 39 acres.

¹ Details are given above, p. 21

Chiplun, the largest of the sub-divisions, is bounded on the north by Dápoli and Khed, on the east by Sátára, on the south by Sangameshvar and Ratnágiri, and on the west by the sea. Its area is about 670 square miles ; its population was, according to the 1872 census returns, 164,953 souls, or 246 to the square mile, and its realizable land revenue in 1878-79 was £16,830 (Rs. 1,68,300).

As the sub-division is not yet fully surveyed area details are not available.

This sub-division stretches from the coast to the Sahyádrí watershed. Like the whole of Ratnágiri, the country is throughout more or less hilly and rugged. The seaboard, with the exception of an open sandy roadstead some five miles long, extending on either side of the populous village of Guhágar, is broken and irregular. Bold bluff headlands alternate with snug bays and sandy coves fringed with belts of cocoa palms, beneath whose shade nestle picturesque villages. Close to the sea shore rise a series of high laterite plateaus which stretch some ten miles inland, where they are succeeded by a belt of lower undulating land of mixed trap and laterite less barren and better wooded. Nearer the Sahyádrí range, as it meets the innumerable spurs and ravines thrown out from the great mountain chain, the country becomes very rugged and precipitous. The Sahyádris are crossed in this sub-division at two points, the north Tivra and the Kumbhárlí passes, the first a rough mountain pass and the latter a made cart road. In the inland tracts, the village homesteads are everywhere well shaded with lofty groves of mango, jack, tamarind, *pipal*, and other shady trees. Here and there on the red soil hill sides the *ain* and the *kinjal* flourish, while on the coast, besides the cocoa and betel palm, the *undi*, *Calophyllum inophyllum*, bearing valuable crops of oilnuts, grows freely. Still, as a whole, the sub-division is badly off for forest trees and good timber is scarce. Teak is rare, and the head waters and gathering grounds of the chief rivers are comparatively bare and treeless.

The climate, though damp and relaxing, is not unhealthy. Inland, and at the foot of the Sahyádris, the heat during March, April, and May, is oppressive. On the sea coast and on the high plateau, running from north to south through the Guhágar petty division, the climate is at all times temperate and free from malaria. The average rainfall for the ten years from 1868 to 1877 was 126·58 inches at Chiplun, while at Guhágar the average during the same period was 76·27, the latter station being on the coast, and the former some twenty-five miles inland.

The Váshishti and the Shástri, which skirt the sub-division on the north and south respectively, are the only rivers of importance. Both streams are tidal for a distance of twenty to twenty-five miles from their mouths, and both are navigable for moderate sized craft up to within a few miles of the furthest point reached by the tide. Of late years both rivers have greatly silted. There are no regular canals or other large irrigational works. On the coast, garden lands are watered entirely by wells, and inland, well water is nearly

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Sub-divisions.

CHIPLUN.

Area.

Aspect.

Climate.

Water.

Chapter XIII.**Sub-divisions.****CHIPLUN.***Water.*

always used, though here and there during the fair season a temporary dam turns the water of a stream into a garden. The rice lands, drained and terraced with infinite labour, entirely depend on the monsoon rainfall. Except the tract at the foot of the Sahyādris and a few of the coast villages, the water supply is on the whole good and abundant. In the villages towards the centre of the sub-division, as for instance at Ibhrañpur, the water is celebrated for its purity. In the town of Chiplun itself, and at the landing place and wharf of Govalkot the supply has hitherto been scanty. But extensive works, a large dam and storage reservoir some three miles from the town, and a covered trench leading thence to the market place, are now under construction.

Soil.

On the coast and along the estuaries of the rivers there is a small amount of sandy drift on which, and on beds of silt brought down by monsoon freshes and artificially reclaimed, garden cultivation is successfully carried on. The bulk of the soil consists of laterite and trap detritus, on which coarse hill grains such as *náchui* Eleusine corocana, *vari* Panicum miliare, and *harik* Paspalum scrobiculatum, can alone be produced. Along the banks of the rivers there is a small proportion of good alluvial soil, which yields fair crops of rice, and in some cases second crops of various kinds of pulses. The *tur* or pigeon pea, Cajanus indicus, is also successfully grown on the banks of the Vá-hishti and on the island of Govalkot. The stalks of the *tur*, here grown, have from their length and straightness been found especially suitable for the charcoal required for gunpowder manufacture. Gram, wheat, and sugarcane are sometimes but rarely grown in the same localities.

Stock.

According to the 1878-79 agricultural stock returns, there were 16,666 ploughs, 120 carts, 31,286 oxen, 22,313 cows, 11,051 buffaloes, 92 horses, and 8514 sheep and goats.

Produce.

Of the 296,576 acres under actual tillage in 1877-78, grain crops occupied 280,271 acres or 94.5 per cent, 28,599 of them under rice, *blát*, Oryza sativa; 90,600 under *náchui*, Eleusine corocana; 59,760 under *sáca*, Panicum miliaceum; and 101,312 under *harik*, Paspalum scrobiculatum. Pulses occupied 12,673 acres or 4.3 per cent, 1525 of them under gram, *harbhara*, Cicer arietinum; 4560 under *tur*, Cajanus indicus; 668 under *kulith*, Dolichos uniflorus; 2400 under *mug*, Phaseolus radiatus; 2500 under *ulid*, Phaseolus mungo; and 1020 under other pulses. Oilseeds occupied 2000 acres or 0.67 per cent, all of them under gingelly oilseed, *til*, Sesamum indicum. Fibres occupied 525 acres or 0.17 per cent, 100 of them under Bombay hemp, *san*, Crotalaria juncea, and 125 under brown hemp, *ambádi*, Hibiscus cannabinus. Miscellaneous crops occupied 1107 acres or 0.37 per cent, 236 of them under sugarcane, *us*, Saccharum officinarum, and the rest under miscellaneous vegetables and fruits.

People,
1872.

The 1872 census returns show of a total population of 177,134 souls, 163,314 or 92.19 per cent Hindus; 13,818 or 7.80 per cent Musalmáns; and 2 Christians. Statistics specially prepared from the enumerators' returns give the following caste details. 1982

Bráhmans ; 283 Parbhus, writers ; 1361 Vánis, 358 Gujars, 179 Bhátíás, 127 Lingáyats, and 4 Márvádís, traders and merchants ; 16,159 Kunbis, 59,960 Maráthás, 151 Bhandáris, 388 Málís, 380 Shindás, and 7 Mitgávdás, cultivators ; 740 Telis, oil-pressers ; 491 Koshtis, and 114 Sálís, weavers ; 22 Sangars, weavers of coarse woollens ; 2873 Sutárs, carpenters ; 2041 Kumbhárs, potters ; 2136 Sonárs, gold and silver-smiths ; 740 Kásárs, workers in bell metal ; 85 Lohárs, blacksmiths ; 16 Otáris, founders ; 220 Shimpis, tailors ; 187 Guravs, worshippers and temple servants ; 156 Bhorpis, rope-dancers ; 1723 Nhávis, barbers ; 801 Parits, washermen ; 4991 Gavlis, cowherds, 847 Dhangars, shepherds ; 1661 Bhois, and 3 Khárvis, sailors and fishers ; 234 Buruds, bamboo and rattan basketmakers ; 15 Bhádbhunjás, parchers and sellers of parched grain ; 2 Támbolis, betelnut and leaf sellers ; 6 Rájputs, and 21 Rámoshis, messengers and constables ; 90 Beldárs, stonecutters ; 2633 Chámbhárs, shoemakers, and 26 Jingars, saddlers and workers in leather ; 21,020 Mhárs, and 3 Mángs, depressed classes ; 39 Kátkaris, catechumakers, and 29 Dongar Kolis, unsettled tribes ; 862 Jangams, 353 Gosávis, 122 Gondhlis, and 70 Saravdás, religious beggars and merchants. As regards occupation, the same return arranges the whole population under the seven following classes : i. Employed under Government or local authorities, 538 ; ii. Professional persons, 726 ; iii. In service or performing personal offices, 1512 ; iv. Engaged in agriculture or with animals, (a) cultivators 85,474, (b) labourers 3, total 85,477 ; v. Engaged in commerce and trade, 2201 ; vi. Employed in mechanical arts, manufactures, and engineering operations, and engaged in the sale of articles manufactured or otherwise prepared for consumption, 8131 ; vii. Miscellaneous persons not classed otherwise, (a) women 15,062 and children 61,191, in all 76,253 ; and (b) miscellaneous persons 1996 ; total 78,249.

Sangameshvar, separated like Khed from the coast by the Ratnágiri sub-division, has on its north the Chiplun sub-division, on its east Sátára and the Kolhápúr state, on its south Rájápúr, and on its west Ratnágiri. Its area is about 538 square miles ; its population was, according to the 1872 census returns, 107,891 souls or 200 to the square mile, and its realizable land revenue in 1878-79 was £12,620 (Rs. 1,26,200).

As the sub-division is not yet fully surveyed area details are not available.

This sub-division is situated inland and has no seaboard. The tract lying to the north of the Shástri river is hilly but not particularly rugged, save at the foot of the Sahyádris. To the south of the river the sub-division consists for the most part of comparatively level table-land running close up to the foot of the Sahyádrí range. Towards the south of this plain lies the village of Devrukh, the present head-quarters of the sub-division. In former years the banks and valleys of the Shástri and its tributary the Báv are said to have been well stocked with teak of fair size and other useful forest trees. All the most valuable timber has long since been cut for shipbuilding, and the hill sides are now either bare or covered with thin scrub and brushwood. Elsewhere the country is fairly

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Sub-divisions.

CHIPLUN.

*People,
1872.*

SANGAMESHVAR.

Area.

Aspect.

Chapter XIII.**Sub-divisions.****SANGAMESHVAR.**

well wooded and the village sites are all shaded with lofty trees. The principal points at which the Sahyádrí range is crossed in this sub-division are the south Tivra, the Mala, and the Kundi passes. The water-shed of the Sahyádris forms the eastern boundary of this sub-division, as of the whole district, as far south as the state of Sávantvádi. The village of Gotne is an exception, as it is situated on the eastern side of the water-shed.

Climate.

This sub-division, from its inland situation, is subject to greater extremes of heat and cold than tracts lying nearer to the coast. In the hot months the influence of the cool sea breeze is scarcely felt, as the currents pass high overhead. The country is not unhealthy and the level plain on which Devrukh the present headquarters of the sub-division stands, is during the cold season one of the pleasantest camping grounds in the district. The average rainfall recorded at Sangameshvar, the former head-quarters, was, for the ten years ending 1877, 127·25 inches.

Water

The chief river is the Shástri, the main stream of which cuts the sub-division nearly in half. The Gad, a tributary of the Shástri, bounds the sub-division on the north, while the Báv, another tributary, forms the western boundary. The Shástri was formerly navigable for the largest native craft up to the quay at Sangameshvar, but no vessels of any size can now come within six miles of this point. The Báv river is navigable for small boats as far as the village of Vándri, and similarly the Gad affords a passage for small craft as far as the village of Mákhjan, where there is a small landing place. There are no irrigational works in the sub-division, and very little garden land ; but here and there along the course of the Báv, rude water-lifts are used for irrigating fair weather crops. Drinking water is rather scanty, only 54 villages out of 155 having good wells. The want is most felt near the Sahyádris. Several hot springs of varying temperature are found in this sub-division.¹

Soil.

There is a fair amount of alluvial soil in the river valleys yielding average crops of rice and pulse. Almost all of the rest is crumbled trap.

Stock.

According to the 1878-79 agricultural stock returns, there were 5183 ploughs, 13 carts, 10,224 oxen, 8447 cows, 3466 buffaloes, 22 horses, and 4339 sheep and goats.

Produce.

Of the 20,423 acres under actual tillage in 1877-78, grain crops occupied 19,136 acres or 93·69 per cent, 6069 of them under rice, *bhát*, *Oryza sativa* ; 5253 under *náchni*, *Eleusine corocana* ; 3310 under *sára*, *Panicum miliaceum* ; and 1504 under *harik*, *Paspalum scrobiculatum*. Pulses occupied 736 acres or 3·60 per cent, 3 of them under gram, *harbhara*, *Cicer arietinum* ; 10 under *tur*, *Cajanus indicus* ; 10 under *kulith*, *Dolichos uniflorus* ; 80 under *mug*, *Phaseolus radiatus* ; 320 under *udid*, *Phaseolus mungo* ; and 313 under other pulses. Oilseeds occupied 467 acres

¹ Details are given above, p. 21

or 2·28 per cent, all of them under gingelly oilseed, *til*, *Sesamum indicum*. Fibres occupied 28 acres or ·13 per cent, all of them under Bombay hemp, *san*. Miscellaneous crops occupied 56 acres, or 0·26 per cent, of which 36 acres were under sugarcane, *us*, *Saccharum officinarum*, and 20 under miscellaneous vegetables and fruits.

The 1872 census returns show, of a total population of 90,966 souls, 86,118 or 94·67 per cent Hindus; 4845 or 5·32 per cent Musalmáns; and 3 Christians. Statistics specially prepared from the enumerators' forms give the following caste details: 5925 Bráhmans; 3138 Vánis, 118 Lingáyats, 18 Bhátíás, and 9 Jains, traders and merchants; 31,209 Kunbis, 14,864 Maráthás, 2745 Shindás, 959 Bhandáris, 4 Gávdás, and 1 Máli, cultivators; 1141 Telis, oil-pressers; 157 Koshtis, and 41 Sális, weavers; 162 Sangars, weavers of coarse woollen blankets; 1672 Sutárs, carpenters; 933 Kumbhárs, potters; 1152 Sonárs, gold and silversmiths; 655 Kásárs, workers in bell metal; 66 Tábats, braziers and coppersmiths; 125 Lohárs, blacksmiths; 4 Otáris, founders; 18 Ghisádis, tinkers; 93 Shimpis, tailors; 3351 Guravs, worshippers and temple servants; 49 Bhorpis, rope-dancers; 890 Nhávis, barbers; 208 Parits, washermen; 3477 Gavlis, cowherds, 736 Dhangars, shepherds; 75 Khárvis, 3 Kolis, 225 Bhois, and 1 Gábit, sailors and fishers; 4 Rámoshis, watchmen; 821 Chámbhárs, shoemakers; 6 Jingars, saddlers; 10,261 Mhárs, village servants; 15 Thákurs, wanderers; 493 Gosávis, 194 Jangams, 28 Gondhlis, and 72 Saravdás, religious beggars. With respect to occupation the same return arranges the whole population under the seven following classes: i. Employed under Government or local authorities, 290; ii. Professional persons, 111; iii. In service or performing personal offices, 528; iv. Engaged in agriculture and with animals, 42,946, all under the sub-head (*a*) cultivators; v. Engaged in commerce and trade, 859; vi. Employed in mechanical arts, manufactures, and engineering operations, and engaged in the sale of articles manufactured or otherwise prepared for consumption, 3543; vii. Miscellaneous persons not classed otherwise, (*a*) women 5168 and children 35,782, in all 40,950; and (*b*) miscellaneous persons 1739; total 42,689.

Ratna'giri, lying in the centre of the district, is bounded on the north by Chiplun, on the east by Sangameshvar, on the south by Rájápur, and on the west by the sea. Its area is about 430 square miles; its population was, according to the 1872 census, 129,576 souls, or 301 to the square mile; and in 1878-79, its realizable land revenue was £10,578 (Rs. 1,05,780).

As the sub-division is not yet fully surveyed area details are not available.

The Ratnágiri sub-division has a seaboard of about thirty-five miles, stretching from the bold headland of Jaygad at the mouth of the Shástri river on the north, to the fort of Purangad at the mouth of the Muchkundi on the south. Eastwards it is flanked by portions of the Sangameshvar and Rájápur sub-divisions, which separate it from the Sahyádrí range. The tract thus enclosed is in shape an

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Sub-divisions.

SANGAMESHVAR.

People,
1872.

RATNÁGIRI.

Area.

Aspect.

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Sub-divisions.

RATNÁGIRI.

Aspect.

irregular triangle, with its apex at the north-western end. The country consists for the most part of a series of rocky plateaus capped with weather-stained laterite and low rugged hills intersected by steep ravines and deeply scoured water-courses. The extreme breadth of the tract is from sixteen to seventeen miles. The coast line is bold and indented by numerous bays, creeks, and backwaters. Bold headlands, jutting out at intervals into the sea, give protection to the local shipping and small craft during northerly winds, while the Kálbádevi bay, lying on the north side of the high hill of Mirya, gives safe anchorage for craft of all size during the south-west monsoon. The cliffs throughout a great part of the coast line rise abruptly from a rocky beach. Sandy bays occur at intervals with narrow belts of drift between sea and cliff, thickly planted with cocoanut, betelnut, and *undli*, *Calophyllum inophyllum*. In places as near Ratnágiri the cliffs fall back a considerable distance from the sea, the intervening space being filled with extensive salt swamps, with here and there a few reclaimed rice fields. From the cliffs overhanging the sea to the summit of the valley of the Báv river, which during several miles of its course forms the eastern boundary of the sub-division, a gentle and gradual rise may be observed. The laterite plateau, of which great part of the whole area of the tract consists, is mostly bare and uninviting. Coarse grass and stunted trees forcing themselves with difficulty through crevices, and here and there a patch of the poorer hill grains are the only vegetation during the greater part of the year. To these may be added, during the rainy season, a profusion of ferns and lilies springing, as if by magic, under the influence of the countless rills and water-courses which redeem the land from utter barrenness. Throughout the greater part of this tract the landscape is flat and unpleasing. But here and there at the edges of the larger ravines, where the rivers may be seen winding through more fertile valleys and shady village homesteads, the scenery is at once homely and picturesque.

Climate.

The sub-division is on the whole decidedly healthy and free from epidemic disease. Liver complaints are rare, and the chief sickness that prevails is due to intermittent fevers. Boils also are a very common ailment. The climate is moist and relaxing. During the rainy season the air is close and muggy in the intervals between the showers, and raw and chilly while rain is falling. From November to the end of May the heat of the sun is tempered through the greater part of the day by cool northerly breezes. Extremes of heat and cold are not felt and the climate is equable throughout the year.¹ The mean annual temperature during 1878 was found to be 80° 54', the average monthly maximum during this period being 87° 7', and the average monthly minimum 74° 2'.² May, with a

¹ The station stands 150 feet above the sea. Detailed thermometer readings are given above, p. 24, 25.

² 1878 was an exceptional year with the highest recorded rainfall. The mean yearly temperature taken from the monthly averages of the six years ending 1876 was 81° 45'.

mean maximum of 93°, was the hottest, and December, with a mean minimum of 66° 7', the coolest month. The average rainfall for the twenty-eight years ending 1878, as recorded at the Civil Hospital, is 101·49 inches. This divided into three shorter periods of ten, ten, and eight years shows a progressive increase. The average for the first period 1851 to 1860 is 100·63 inches; for the second, 1861 to 1870, 101·23 inches; and for the third, 1871 to 1878, 102·90 inches.¹

The chief Ratnágiri rivers are the Shástri, the Báv (a tributary of the Sháshtri), and the Muchkundi, which bound it on the north-east and south, and the Bhátia creek or Ratnágiri river, at the mouth of which, on the northern bank, lies the head-quarter station of the district. Of these the Sháshtri alone is navigable for craft of any size. Boats of light draught pass up the Bhátia creek as far as Harchari, a distance of about twelve miles, and up the Muchkundi as far as Sátavli, about fifteen miles. The Báv river is also navigable as far as Vándri in the Sangameshvar sub-division on the north bank, and is much used for floating timber down to the landing places. Within the limits of this sub-division all these rivers are tidal and unfit for irrigation. In a few villages crops of summer rice are watered by damming the smaller streams. There are no large ponds or reservoirs. The supply of drinking water is on the whole fair. An extensive project for supplying the town and civil station of Ratnágiri with water brought in a covered channel from a stream in the village of Náchni, two miles and a half distant, has lately been completed.²

The soil differs in no respect from that of the sub-divisions already described. There are alluvial deposits on the banks and at the estuaries of the creeks. The plateaus and hills above consist almost entirely of laterite, which crops to the surface in boulders and flat sheets of rock. Here and there, where by the crumbling of the rock a sufficient depth of soil has been formed, hill grains are grown; but the proportion of waste land is very large. Below in the valleys and on the river banks there is a fair amount of good rice and garden land, the latter being watered chiefly from wells. The staple products of the soil are rice, *harik*, *Paspalum scrobiculatum*, *vari*, *Panicum miliare*, and *náchni*, *Eleusine corocana*.

According to the 1878-79 agricultural stock returns, there were 9560 ploughs, 64 carts, 19,433 oxen, 13,093 cows, 5763 buffaloes, 82 horses, and 4325 sheep and goats.

Of the 150,538 acres under actual tillage in 1877-78, grain crops occupied 116,285 acres or 97·17 per cent, 11,107 of them under rice, *bhát*, *Oryza sativa*; 51,073 under *náchni*, *Eleusine corocana*; 21,388 under *vari*, *Panicum miliaceum*; and 56,717 under *harik*, *Paspalum scrobiculatum*. Pulses occupied 1500 acres or 0·99 per cent, 500 of them under horse gram, *kulith*,

Chapter XIII.

Sub-divisions.

RATNÁGIRI.

Water.

Soil.

Stock.

Produce.

¹ The annual mean temperature of Ratnágiri is given in Chambers' Meteorology of the Bombay Presidency (p. 154) as 80° 8 and the range between the greatest and least monthly means as 7°.

² Details are given below, p. 364.

Chapter XIII.**Sub-divisions.****RATNÁGIRI.***Produce.*

Dolichos uniflorus; 10 under *mug*, *Phaseolus radiatus*; 20 under *udid*, *Phaseolus mungo*; and 970 under other pulses. Oilseeds occupied 1050 acres or 0·69 per cent, all of them under gingelly oilseed, *til*, *Sesamum indicum*. Fibres occupied 125 acres or 0·08 per cent, 62 of them under brown hemp, *ambádi*, *Hibiscus cannabinus*, and 63 under Bombay hemp, *san*, *Crotalaria juncea*. Miscellaneous crops occupied 1578 acres, or 1·04 per cent, 60 of them under sugarcane, *us*, *Saccharum officinarum*, and the rest under miscellaneous vegetables and fruits.

Peopl,
1872.

The 1872 census returns show, of a total population of 119,741 souls, 103,689 or 86·59 per cent Hindus; 15,933 or 13·30 per cent Musalmáns; and 119 or 0·09 per cent Christians. Statistics specially prepared from the enumerators' returns give the following caste details: 11,174 Bráhmans; 110 Parbhús, writers; 2211 Vánis, 24 Bhátiás, 34 Jains, and 9 Márvádís, traders and merchants; 31,931 Kunbis, 8623 Maráthás, 4812 Shindás, 16,372 Bhandáris, 36 Mitgávdás, and 1 Ghádi, cultivators; 2597 Telis, oil-pressers; 204 Sális, weavers; 1578 Satárs, carpenters; 1373 Kumbhárs, potters; 1624 Sonárs, gold and silversmiths; 82 Kásárs, workers in bell metal; 150 Támblats, brass and copper-smiths; 1 Otári, founder; 591 Lohárs, blacksmiths; 110 Shimpis, tailors; and 3 Gaundis, masons; 2782 Guravs, worshippers and temple servants; 26 Bhorpis, rope-dancers; and 2 Devlis, temple servants; 930 Nhávis, barbers; 415 Parits, washermen; 27 Gavlis, cowherds; 628 Dhangars, shepherds; 3095 Khárvis, 70 Gábits, 23 Kolis, and 228 Bhois, sailors and fishermen; 2 Rámoshis, messengers and constables; 816 Chámbhárs, shoemakers; 18 Jingars, saddlers; 7799 Mhárs, village servants; 119 Sarvadás, 23 Gondhlis, and 1 Jangam, religious beggars. With regard to occupation the same return arranges the whole population under the seven following classes: i. Employed under Government or local authorities, 582; ii. Professional persons, 931; iii. In service or performing personal offices, 575; iv. Engaged in agriculture or with cattle, (*a*) cultivators 31,814, (*b*) labourers 605, total 35,419; v. Engaged in commerce and trade, 5274; vi. Employed in mechanical arts, manufactures, and engineering operations, and engaged in the sale of articles manufactured or otherwise prepared for consumption, 9915; vii. Miscellaneous persons not classed otherwise, (*a*) women 23,108 and children 40,461, in all 63,569; and (*b*) miscellaneous persons 476; total 64,045.

RAJAPUR.

Ra'ja'pur, second in size to Chiplun, is bounded on the north by the Ratnágiri and Sangameshvar sub-divisions, on the east by Kolhápúr, on the south by Devgad from which it is separated by the Vijaydurg creek, and on the west by the sea. Its area is about 632 square miles, its population, according to the 1872 census returns, was 136,544 souls, or 216 to the square mile, and in 1878-79, its realizable land revenue was £15,340 (Rs. 1,53,400).

Area.

As the sub-division is not yet fully surveyed area details are not available.

Aspect.

The Rájápur sub-division has a seaboard of about twenty miles lying between the Muchkundi river on the north and the Vijaydurg creek on the south. Extending inland to the water-shed of the

Chapter XIII.

Sub-divisions.

RÁJÁPUR.

Aspect.

Sahyádrí range, it has an average breadth of about thirty-five miles. The physical configuration of the country differs little from that of the adjoining sub-division of Ratnágiri. The line of coast, broken into two sections by the large estuaries of the Muchkundi, Jaytápur, and Vijaydurg rivers, is very bold and irregular, the chief headland being Yashvantgad at the mouth of the Jaytápur creek. The cliffs rise close to the sea shore to a height of about seventy feet, faced by huge masses of laterite, which have been dislodged by the continued action of the sea during the south-west monsoon. The coast is deeply indented in many places, and at any distance above a quarter of a mile from land is clear of danger. For some ten or twelve miles inland lie a series of low rugged hills and rocky plateaus, becoming more waving towards the east, where trap replaces laterite. Towards the coast the hills are bare, and save in the rainy months, destitute of vegetation. The soil is poor and worthless, and cultivation is chiefly confined to the numerous valleys and ravines. The villages on the coast are well shaded by cocoanut gardens. Further inland the country is better wooded, and the village homesteads are surrounded by shady groves, but there are no forests of any importance or value. The tract at the foot of the Sahyádris is broken by countless spurs, ridges, and deeply cut gorges. At the north-east angle, close to the old fort of Vishálgad and detached from the main Sahyádrí range, is Máchál,¹ a high hill surmounted by a fine broad plateau. The two chief passes in this sub-division are the Anaskura and the Kájirda, both of which can be traversed by pack bullocks. The chief port of the sub-division is Jaytápur.

The climate is usually considered healthy, especially near the coast, where the sea breeze is felt throughout the greater part of the year. Inland, during April and May, the heat is oppressive. The average rainfall for the ten years ending 1877 was 113·32 inches at Rájápur and 127·25 at Láuja.

Climate.

The chief rivers from north to south are the Muchkundi, the Jaytápur, and the Vijaydurg, each of which receives the waters of several small tributary streams. All these rivers owing, it is believed, to the denudation of the forests protecting their head waters, have of late years silted much. The Muchkundi can be navigated by very small craft for about twelve miles into the interior. The Jaytápur river was formerly navigable for good sized craft up to the old town and port of Rájápur. But for many years no vessels drawing more than eight feet have passed within four miles of this point. The mouth of the river, flanked on its north bank by the Yashvantgad headland, makes a moderate fair weather port, but is exposed to westerly winds. The Vijaydurg river is navigable throughout its course in this sub-division. The estuary affords good anchorage all the year round, and the Vijaydurg, unlike most of the Konkan rivers, has no bar. There are no ponds or other large irrigational works. The supply of drinking water is generally good for twelve miles inland, but is deficient in the villages at the foot of the

Water.

¹ Transferred to the Sangameshvar sub-division from 1st August 1879.

Chapter XIII.

Sub-divisions.

RÁJÁPUR.

Soil.

Sahyádrí hills. In the town of Rájápur extensive works for water supply have been executed by the municipality, and pure water is now distributed by pipes in all the principal streets and houses of the town. Near Rájápur is an intermittent and several hot springs.

Near the coast, the soil consists of disintegrated laterite and iron clay, and inland, of a darker material, the product of the trap rocks. Alluvial deposits occur along the lower reaches of the rivers forming *rabi* and rice land, while the sandy ground on the coast produces flourishing cocoanut gardens.

Stock.

According to the 1878-79 agricultural stock returns, there were 14,050 ploughs, 45 carts, 28,590 oxen, 25,400 cows, 10,040 buffaloes, 35 horses, 5 asses, and 9025 sheep and goats.

Produce.

Of the 40,445 acres under actual tillage in 1877-78 grain crops occupied 37,134 acres or 91·68 per cent, 14,744 of them under rice, *bhát*, *Oryza sativa*; 7320 under *náchai*, Eleusine corocana, 5750 under *sava*, *Panicum miliaceum*; and 9320 under *harik*, *Paspalum serobiculatum*. Pulses occupied 1057 acres or 2·61 per cent, 32 of them under *tur*, *Cajanus indicus*; 402 under horse gram, *kulith*, *Dolichos uniflorus*; 32 under *mug*, *Phaseolus radiatus*; 366 under *udidil*, *Phaseolus mungo*; and 225 under miscellaneous pulses. Oilseeds occupied 870 acres or 2·13 per cent, all of them under gingelly oilseed, *til*, *Sesamum indicum*. Fibres occupied 767 acres or 1·89 per cent, all under Bombay hemp, *san*, *Crotalaria juncea*. Miscellaneous crops occupied 617 acres or 1·52 per cent, 200 of them under sugarcane, *us*, *Saccharum officinarum*, and the rest, 417 acres, under miscellaneous vegetables and fruits.

Popul.,
1872.

The 1872 census returns show, of a total population of 168,498 souls, 156,735 or 93·02 per cent Hindus, 11,616 or 6·89 per cent Musalmáns, 146 or 0·09 per cent Christians; and one Pársi. Statistics specially prepared from the enumerators' forms give the following caste details: 13,199 Bráhmans; 19 Parbhús, writers; 7885 Vánis, 542 Lingáyats, 16 Gujars, 88 Bhátiás, and 151 Jains, traders and merchants; 55,932 Kunbis, 22,243 Maráthás, 10,493 Bhandáris, 3687 Shindás, 1596 Gávdás, 242 Ghádis, and 1 Máli, cultivators; 3920 Telis, oil-pressers; 123 Koshtis, and 154 Sális, weavers; 209 Sangars, makers of coarse woollen cloth; 2629 Sutárs, carpenters; 1672 Kumbhárs, potters; 1817 Sonárs, gold and silversmiths; 355 Kásárs, workers in bell metal; 155 Tábats, brass and coppersmiths; 95 Lohárs, blacksmiths; 20 Otáris, founders; 294 Shimpis, tailors; 6689 Guravs, worshippers and temple servants; 10 Bhorpis, rope-dancers; 1327 Nhávis, barbers; 445 Parits, washermen, 900 Dhangars, shepherds; 1267 Gavlis, cowherds; 1800 Gábíts, 120 Kolis, 539 Khárvís, and 18 Bhois, sailors and fishermen; 18 Rajputs, messengers and constables; 1435 Chumbhárs, cobblers and shoemakers; 13,074 Mhárs, village servants; 28 Kátkaris, catechumakers, and 20 Thákurs, wanderers; 340 Saravdás, 976 Gosávis, 51 Gondhlis, 57 Bhutes, and 84 Jaugams, religious beggars. With respect to occupation the same return arranges the whole population under the seven following classes: 1. Employed under Government or local authorities, 939.

ii. Professional persons, 1335 ; iii. In service or performing personal offices, 1420 ; iv. Engaged in agriculture and with animals, (*a*) cultivators 71,768, (*b*) labourers 1326, total 73,094 ; v. Engaged in commerce and trade, 3296 ; vi. Employed in mechanical arts, manufactures, and engineering operations, and engaged in the sale of articles manufactured or otherwise prepared for consumption, 6379 ; vii. Miscellaneous persons not classed otherwise, (*a*) women 23,514 and children 56,947, in all 80,461 ; and (*b*) miscellaneous persons 1661 ; total 82,122.

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Sub-divisions.

Devgad is bounded on the north by Rájápur, on the east by the Kolhápúr state, on the south by the Mályan sub-division and the Sávantvádi state, and on the west by the sea. Its area is about 521 square miles, its population, according to the 1872 census returns, was 124,115 souls or 238 to the square mile, and in 1878-79, its realizable land revenue was £9275 (Rs. 92,750).

DEVGAD.

As the sub-division is not yet fully surveyed area details are not available.

Area,

The Devgad sub-division, about twenty-six miles long and on an average thirty-two broad, stretches, except for a few Báyda villages at the north-east corner, from the coast to the water-shed of the Sahyádris. At the north-west corner the rocky headland of Vijaydurg juts some distance into the sea. On the inner side of this neck of land, about 100 feet above the sea, stands the old timeworn and crumbling fort of Girya. Fourteen miles south of Vijaydurg is the headland and fort of Devgad, the present head-quarters of the sub-division. The coast line from Vijaydurg to Devgad, and from Devgad to the Áchra river the southern boundary, is comparatively regular, though cut into by numerous small rivers and creeks. The cliffs are steep and rise close to the beach, leaving here and there at their base small sandy coves, where, hidden among groves of palms, lie picturesque fishing villages. Above the cliffs are flat table-lands and jagged hills of bare laterite with little or no vegetation save in the rainy months. Twelve miles or so inland are numerous chains of hills more waving and better wooded, leading in broken and irregular lines to the wilder tract at the base of the Sahyádris. There are no forests of any value, but the inland parts and all the village sites are well wooded. The only pass into the Deccan of any note is the Phonda, over which there is a made cart road communicating with Nipáni and Kolhápúr. The principal ports are Vijaydurg, Vághotan, and Devgad.

Aspect,

Devgad, the head-quarters of the sub-division, is by the native officials, but perhaps without sufficient cause, considered feverish and unhealthy. Like the rest of the district the climate is temperate on the coast and for a few miles inland, while at the foot of the Sahyádris are wide extremes of heat and cold. The rainfall at Devgad from 1875 to 1877 averaged eighty-one inches, and at Khárepátan, the former head-quarters, from 1868 to 1874, 127 inches.

Climate,

The principal rivers are the Vijaydurg, the Mitmumbari, the Mithbáv, and the Áchra. Besides these the Gad, a tributary of

Water,

Chapter XIII.

Sub-divisions.

DEVGAD.

Water.

the Kálávali creek, flows for a part of its course through the south-eastern corner of the sub-division. The Vijaydurg, the northern boundary, is navigable for vessels drawing seven feet of water as far as Vághotan, where there is a stone jetty, and for canoes as far as Khárepátan, twenty miles inland. The mouth of this river gives a good anchorage all the year round. The Áchra, which for the last few miles of its course forms the southern boundary of the sub-division, is navigable for four miles for small craft only. The Devgad river, the estuary of which forms an indifferent fair weather port, and the Mithbáv and the Mitmumbari are similarly navigable for small boats only. All the above rivers are tidal except the Gad. There are no irrigational works worth notice. The water supply is fair for twenty miles inland, but as usual deficient in the villages on the slopes and spurs of the Sahyádrí range.

Soil.

The soil is everywhere poor. Here and there at the foot of the Phonda pass, and about the village of Lora, patches of soft clay soil and variously coloured shales relieve the monotony of laterite and trap, but add nothing to the agricultural value of the tract which is the poorest in the district.

Stock.

According to the 1878-79 agricultural stock returns, there were 14,840 ploughs, 69 carts, 31,684 oxen, 23,563 cows, 11,231 buffaloes, 56 horses, and 7961 sheep and goats.

Produce.

Of the 30,325 acres under actual tillage in 1877-78, grain crops occupied 24,766 acres or 81 per cent, 13,969 of them under rice, *bhát*, *Oryza sativa*; 3461 under *náchni*, *Eleusine corocana*; 2551 under *síva*, *Panicum miliaceum*; and 4785 under *harik*, *Paspalum serobiculatum*. Pulses occupied 2071 acres or 6·82 per cent, 4 of them under gram, *harbhara*, *Cicer arietinum*; 39 under *tur*, *Cajanus indicus*; 1421 under *kulith*, *Dolichos unilorus*; 66 under *mug*, *Phaseolus radiatus*; 180 under *ulid*, *Phaseolus mungo*; and 61 under miscellaneous pulses. Oilseeds occupied 1393 acres or 4·5 per cent, 1369 of them under gingelly oilseed, *til*, *Sesamum indicum*, and 24 under miscellaneous oilseeds. Fibres occupied 993 acres or 3·27 per cent, all of them under Bombay hemp, *san*, *Crotalaria juncea*. Miscellaneous crops occupied 1102 acres or 3·63 per cent, 352 of them under sugarcane, *us*, *Saccharum officinarum*, and the rest under various orchard and vegetable crops.

People,
1872.

The 1872 census returns show, of a total population of 118,921 souls, 111,892 or 96·61 per cent Hindus, 3166 or 2·66 per cent Musalmáns, and 863 or 0·72 per cent Christians. Statistics specially prepared from the enumerators' forms give the following caste details: 6975 Bráhmans; 9 Parbhús, writers; 10,152 Vánis, 249 Lingáyats, 12 Bhátíás, and 672 Jains, traders and merchants; 13,459 Kunbis, 46,270 Maráthás, 668 Shindás, 5956 Bhandáris, 82 Gávdás, 3982 Mitgávdás, and 4 Mális, cultivators; 2984 Telis, oil-pressers; 568 Koshtis, weavers; 45 Sangars, weavers of coarse woollen cloth; 2030 Sutárs, carpenters; 1462 Kumbhárs, potters; 1545 Sonárs, gold and silversmiths; 592 Kásárs, workers in bell metal; 38 Tábats, brass and copper-smiths; 38 Lohárs, blacksmiths; 305 Shimpis, tailors; 329 Guravs, worshippers and temple servants; 20 Bhorpis, rope-dancers; 163 Devlis, temple-servants; 957 Nhávis,

barbers; 655 Parits, washermen; 521 Dhangars, shepherds; 19 Gavlis, cowherds; 4113 Gábits, 31 Kolis, and 1 Khárvi, sailors and fishers; 2 Rajputs, and 2 Rámoshis, messengers and constables; 1016 Chámbhárs, cobblers and shoemakers; 29 Jingars, saddlers; 8203 Mhárs, village servants; 225 Thákurs, and 18 Vadars, wanderers; 481 Gosávis, and 10 Gondblis, religious beggars. As regards occupation, the same return arranges the whole population under the seven following classes: i. Employed under Government or local authorities, 414; ii. Professional persons, 413; iii. In service or performing personal offices, 902; iv. Engaged in agriculture and with animals, (a) cultivators 57,691, (b) labourers 1423, total 59,114; v. Engaged in commerce and trade, 1503; vi. Employed in mechanical arts, manufactures, and engineering operations, and engaged in the sale of articles manufactured or otherwise prepared for consumption, 9023; vii. Miscellaneous persons not classed otherwise, (a) women 6028 and children 40,145, in all 46,173; and (b) miscellaneous persons 1379; total 47,552.

Malvan is bounded on the north by the Devgad sub-division, on the east by the Sávantvádi state which runs between the Málvan country and the Sahyádrī range, on the south by the Karli creek, and on the west by the sea. Its area is about 56 square miles; its population was, according to the 1872 census, 88,135 souls or 1573 to the square mile, and in 1878-79 its realisable land revenue was £8326 (Rs. 83,260).

As the sub-division is not yet fully surveyed area details are not available.

Málvan, about eighteen miles from north to south and from sixteen to eighteen from east to west, the seaboard between the mouth of the Áchra in the north and the mouth of the Karli in the south, consists chiefly of an open sandy roadstead intersected by the Kolamb and Kálávali creeks. Like the rest of the district, Málvan is broken and irregular, a series of rugged hills and rich valleys. The plateaus are chiefly of bare laterite almost without trees or brushwood. The hill sides are generally steep and brushwood covered. The banks of the Karli and Kálávali creeks are open level plains, yielding rice and sugarcane. The headland of Rájkot at Málvan gives protection to small steamers and country vessels which, during northerly breezes, anchor in Málvan bay. The bay contains a number of rocks, and without a local pilot it is very dangerous to attempt an entrance. The estuaries of the Karli, Kálávali, and Áchra creeks are good fair-weather ports for small sized craft. The villages are well shaded with cocoa palms, jack, mango, *kíju* (*Anacardium occidentale*), and *muli* (*Calophyllum inophyllum*) trees. The villages of Dhámápur, Kándalgaon, and Ovaliye contain Government forest reserves of teak and other valuable trees. The seaboard is densely shaded by cocoa palms. The island fort of Sindhudurg is cut off from the mainland by a channel less than a quarter of a mile broad.¹

Chapter XIII.

Sub-divisions.

DEVGAD.
Produce.

MALVAN.

Area.

Aspect.

¹ Details are given below p. 374.

Chapter XIII.**Sub-divisions.****MÁLVAN.***Water.*

Though occasionally feverish, and especially in the inland villages oppressively hot in April and May, the climate of Málvan is on the whole healthy. The average rainfall recorded for the ten years ending 1878 is 85·32 inches.¹

The water supply is abundant. The Kálávali and Karli creeks are the chief rivers. Both of them are, for fifteen to twenty miles, tidal and navigable for small sized craft. The Dhámápur lake, the largest in the district, has an area of fifty-five acres, and waters about 500 acres in the villages of Dhámápur, Kálsa, and Pendur. The smaller ponds of Pendur, Varád, Tulgaon, and Málvan, and the streamlets running through the villages supply abundance of water throughout the hot weather, and the rice lands irrigated by them yield two crops a year. The supply of drinking water is good, except at Varád and in some parts of Nándos and Pendur where scarcity is felt in April and May. The water of the town of Málvan, and especially of the wells near the sea is a little brackish.

Soil.

The soil here as elsewhere is chiefly composed of laterite, but there is a good deal of alluvial land in the villages along the Karli and Kálávali creeks, which, especially the plain of Bándivde, yields excellent crops of rice, chillies, and sugarcane. The soil of the rice lands at the foot of the hills is generally red and that of the villages bordering the sea is sandy, particularly suited to the growth of cocoa palms. The slopes of the hills are fit only for the coarser grains such as *vari*, *harik*, and sesame. There is also, chiefly along the creeks, a large area of partly reclaimed salt marsh, *khájan*.

Stock.

The 1878-79 agricultural stock returns show a total of 13,029 ploughs, 330 carts, 23,130 oxen, 12,389 cows, 11,373 buffaloes, 35 horses, and 3608 sheep and goats.

Produce.

Of the 62,119 acres under actual cultivation in 1877-78, grain crops occupied 15,711 acres or 73·24 per cent, 26,181 of them under rice, *blóit*, *Oryza sativa*; 47 under *vála*, *Panicum italicum*; 9125 under *náchni*, *Eleusine corocana*; 2496 under *sára*, *Panicum miliaceum*; 7180 under *harik*, *Paspalum scrobiculatum*; and 412 under other cereals. Pulses occupied 4585 acres or 7·34 per cent, 18 of them under *tur*, *Cajanus indicus*; 3111 under *kulith*, *Dolichos uniflorus*; 244 under *mug*, *Phaseolus radiatus*; 1133 under *ndid*, *Phaseolus mungo*; and 79 under other pulses. Oilseeds occupied 3236 acres or 5·18 per cent, all of them under gingelly oilseed, *til*, *Sesamum indicum*. Fibres occupied 406 acres or 0·65 per cent, all of them under Bombay hemp, *san*, *Crotalaria juncea*. Miscellaneous crops occupied 8181 acres or 13·5 per cent, 562 of them under sugarcane, *us*, *Saccharum officinarum*, and 7919 under miscellaneous vegetables and fruits.

*People,
1872.*

The 1872 census returns show, of a total population of 123,273 souls, 119,610 or 97·05 per cent Hindus; 1741 or 1·41 per cent Musalmáns; 1888 or 1·53 per cent Christians; and 4 Parsís.² Statistics specially prepared from the enumerators' forms give the

¹ Chambers' Meteorology of the Bombay Presidency, 184.

² These figures are both for Málvan and Vengutla.

following caste details: 9743 Bráhmans; 33 Parbhus, writers; 2772 Vánis, 86 Lingáyats, 178 Bhátíás, 141 Jains, 5 Márvádís, and 3 Gujars, traders and merchants; 21,882 Kunbis, 25,334 Maráthás, 27,535 Bhandáris, 5276 Gávdás, 488 Farjans, and 480 Shindás, cultivators; 1805 Telis, oil-pressers; 137 Koshtis, weavers; 1863 Sutárs, carpenters; 604 Kumbhárs, potters; 71 Kásárs, workers in bell metal; 1338 Sonárs, gold and silversmiths; 35 Tábats, brass and copper-smiths; 453 Lohárs, blacksmiths; 88 Shimpis, tailors; 141 Guravs, worshippers and temple servants; 20 Bhorpis, rope-dancers; 1156 Devlis, temple servants; 418 Bhávins, prostitutes; 69 Kalávantins, dancing girls; 1200 Nhávis, barbers; 803 Parits, washermen; 66 Gavlis, cowherds; 207 Dhangars, shepherds; 8695 Gábits, and 200 Kolis, fisher- and sailors; 3 Rajputs, messengers and constables; 869 Chámhbárs, cobblers and shoemakers; 21 Jíngars, saddlers; 4506 Mhárs, village servants; 31 Lamáns, and 212 Thákurs, wanderers; 654 Gosávis, 13 Jangams, and 6 Gondhlis, religious beggars. With respect to occupation the same return arranges the whole population under the seven following classes: i. Employed under Government or local authorities, 641; ii. Professional persons, 606; iii. In service or performing personal offices, 910; iv. Engaged in agriculture or with animals, (a) cultivators 49,963, (b) labourers 2129, total 52,092; v. Engaged in commerce and trade, 2163; vi. Employed in mechanical arts, manufactures, and engineering operations, and engaged in the sale of articles manufactured or otherwise prepared for consumption, 14,441; vii. Miscellaneous persons not classed otherwise, (a) women 7390 and children 42,560, in all 49,950; and (b) miscellaneous persons 2470; total 52,420.

Vengurla, situated in the extreme south of the district, is bounded on the north by the Karli creek, which separates it from Málvan, on the east by the Sávantvádi state, on the south by the Portuguese territory of Goa, and on the west by the sea. Its area is about 52 square miles, its population was, according to the 1872 census returns, 35,088 or 674 to the square mile, and in 1878-79, its realisable land revenue was £4677 (Rs. 46,770).

As the sub-division is not yet fully surveyed area details are not available.

Vengurla, about twenty-two miles long and nowhere more than five broad, has in the north a succession of high bare rocky plains and narrow valleys. The steep hill sides have their upper slopes well clothed with brushwood and much of the lower slopes covered with cocoanut and betelnut palms. In the valleys the soil is generally very rich. Much of the south consists of low open belts of sand. The south and east of Redi, the east of Aravli and the south of Vengurla are hilly. Compared with the rest of the district the cliffs are low. The chief headlands are the points of Nivti, Vengurla, and Redi. There are no navigable rivers or creeks. The mouths of the Vengurla, Aravli, and Shiravda streamlets are high tide fair-weather ports for small vessels and fishing boats. At Vengurla there is, for steamers and large country craft, safe anchorage during northerly breezes, but on account of the rocks

Chapter XIII.**Sub-divisions.**

MÁLVAN.

People,
1872.

VENGURLA.

*Area.**Aspect.*

Chapter XIII.**Sub-divisions.****VENGURLA.***Climate.*

the approaches are at all times difficult. On one of a cluster of twelve bare springless sandstone rocks, about twelve miles north-west of Vengurla, a light-house has been built. The villages, each of several hamlets, are large and thickly peopled.

As it all lies within the influence of the sea breeze the climate is free from extreme heat or cold. Though feverish during the last year (1879), it is generally healthy, especially at Vengurla and Redi. The mean annual temperature is $80^{\circ} 2'$, and the range between the greatest and least monthly means is 6° .¹ The average rainfall in the nine years ending 1877 was 110 inches.

Water.

The supply of water is abundant. Almost every valley in the north has a perennial stream. In the south of Redi, a large reservoir waters the valley of Kaniella with gardens of cocoanut and betelnut palms, and at Pát in the Sávantvádi state, to the north of Mhápan, a similar pond waters the Mhápan and Kochra valleys. Throughout the hot weather the streams supply abundance of water and all irrigated rice lands yield a second crop. Except in Shiravda where it is a little brackish, the supply of drinking water is good. The Vengurla municipality lately, at considerable expense, has made water works for the supply of the town.

Soil.

The soil varies considerably in the different parts of the sub-division. In the northern valleys the rice lands are red with a slight mixture of sand. Except in the hills the southern villages are generally sandy. Salt marsh, *khájan*, land is found at the mouths of all streams. Coarse rice is grown on land reclaimed from the sea, while the sandy drifts are planted with cocoa palms.

¹ Chambers' Meteorology of the Bombay Presidency, 184.

CHAPTER XIV.

PLACES OF INTEREST.¹

A'chra, a village and port on the small creek of the same name, lies on the north-west boundary of the Málvan sub-division about ten miles north of Málvan. It had, in 1872, a population of 4507 souls, and for the five years ending 1877-78, an average trade valued at £ 4529 (Rs. 45,290), of which £1929 (Rs. 19,290) were exports and £2600 (Rs. 26,000) imports.

Áchra was in 1555 the scene of a Portuguese victory over Bijápur troops.² In 1819, the year after its capture by Colonel Imlack, it was in every way unimportant.³ Its chief object of interest is the Rámeshvar temple. The principal building, enclosed by a stone wall and surrounded by a paved courtyard, measures sixty-three feet by thirty-eight, and besides the shrine, has a large rest-house with accommodation for all Hindu castes. A fair, held yearly on Rámanvami in *Chaitra* (March-April), is attended by about 1000 people from the neighbouring villages. The village revenues, amounting yearly to £250 (Rs. 2500), are by a grant of Shambhu Maháráj of Kolhápur, dated 1674, set apart for the support of the temple. In the river near Áchra sections of slate beds are exposed. These, not hitherto worked, are probably of some economic value. A china clay or kaolin capable of being used for pottery is also found in and about the village. The fine white sandstones freely exposed in the neighbourhood are locally used as whetstones.

A'de, on a small rather deep creek three miles south of Kelsi, had, in 1872, a population of 1884 souls, chiefly fishermen. In 1819 it was a port with a small trade in corn and fish.⁴ It is now of no importance. There is a small temple of Bhárgavrám.

Adivra, a village in the Rájápur sub-division, twelve miles west of Rájápur, with, in 1872, 4293 people, has a well known temple dedicated to Mahákáli. In her honour, from the second to the tenth day of the first fortnight of *Áshvin* (September-October), a fair is held. Petty shops are opened and about 1000 persons attend.

Ambolgad Fort, on the bay at the north entrance of the Rájápur river, raised very little above sea level and with a ditch on the north and west sides, covers an area of a quarter of an acre. In 1818 the

Chapter XIV.
Places of Interest.

ÁCHRA.

ADE

ADIVRA.

AMBOLGAD

¹ Many of the descriptive notices and details of the present condition, trade, and management of the leading towns have been contributed by Mr. G. Vidal, C. S.

² De Coutto, VII. 169, in Nairne's Konkan, 43.

³ Malvan Resident, 31st May 1819; Bom. Rev. Diaries 141 of 1819, 2311.

⁴ Collector to Gov. 15th July 1819; Bom. Rev. Diaries, 142 of 1819, 2573.

Chapter XIII.**Sub-divisions.****VENGURLA.***Climate.*

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Chapter XIV.
Places of Interest.

ÁCHRA.

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² De Coutto, VII, 169, in Narne's Konkan, 43.

³ Malvan Resident, 31st May 1819; Bom. Rev. Diaries 141 of 1819, 2311.

⁴ Collector to Gov. 15th July 1819; Bom. Rev. Diaries, 142 of 1819, 2573.

Chapter XIV.
Places of Interest.

ANJANVEL.

fort surrendered to Colonel Imlack.¹ In 1862 it was a complete ruin without remains of houses, walls, or bastions. There was no garrison and no water. Supplies were plentiful.²

Anjanvel, north latitude 17° 31' and east longitude 73° 15', a village with an old fort having, along with Peth, in 1872, 3285 people lodged in 540 houses, stands on the south shore of the entrance to the Váshishti or Dábhól river, to which also it gives the name Anjanvel. Under the Maráthás it was the head-quarters of a district administered by a *subhedar*.³ In 1819, in consequence of the removal of the head-quarters to Gulágar, it fell into insignificance,⁴ and since then it has grown little in size or wealth. The river mouth, about a mile broad, is narrowed by a sandbank, that from the north runs within two cables length of the south shore, where on the edge of a plateau 300 feet high is the ancient temple of Tálkeshvar. On the bar at low tide are ten feet of water with, at springs, a rise of ten feet. From its exposed position there is generally a swell.⁵ A light-house is being built at the entrance of the harbour. The average trade for the five years ending 1877-78, was valued at £592,393 8s. (Rs. 59,23,934) of which £314,163 4s. (Rs. 31,41,632) represented exports and £278,230 4s. (Rs. 27,82,302) imports. The port gives good anchorage during the fair weather to vessels passing to and from Chiplun. The custom house at the entrance to the harbour, and a rest-house are the only public buildings. Coasting steamers used to call at Anjanvel. Of late their place of call has been changed to the more sheltered port of Dábhól, two miles higher up the river on the north bank. Weaving is the only industry.

Fort.

Anjanvel fort, called Gopálgad, was built by the Bijápur kings in the sixteenth century, strengthened by Shiváji about 1660,⁶ and improved by his son Sambháji (1681-1689). In 1699 the fort was attacked and captured by Khairát Khán, Habshi of Janjira (1680-1708), who added the lower fort, *padkot*.⁷ In 1744 (December), Tuláji Ángria Sirkhel took it from the Habshi, and naming it Gopálgad, added the upper fort, *bálkot*. From him, in 1755, it passed to the Peshwa,⁸ and on the Peshwa's overthrow, fell to Colonel Kennedy on the 17th May 1818.⁹ The fort stands on a prominent and commanding point on the south shore of the creek entrance half a mile from Anjanvel. It covers seven acres, and is surrounded on three sides by the sea, and on the fourth by a deep ditch now partly filled.¹⁰ There is

¹ Service Record, H. M.'s IVth Rifles, 28.

² Gov. List of Civil Forts, 1862.

³ Nairne's MS.

⁴ Collector to Gov. 15th July 1819; Bom. Rev. Diaries 142 of 1819, 2575.

⁵ Taylor's Sailing Directory, 387.

⁶ Jervis' Konkán, 92.

⁷ Some Persian verses on a flat oblong stone give the date 1707 and the builder's name Sidi Saad. The verses are: Whoever built a new mansion, when he was called away did it not belong to another? God is immortal and all else subject to death. When the kind king, the light of the world, gave the order, the fort was made which he could not live to see. Sidi Saad (built) the fort. Written on the 10th of *Zil Hajj*, the first year of the reign, Hijra 1119 (A.D. 1707).

⁸ Nairne's Konkán, 92.

⁹ Nairne's Konkán, 116; Service Record of H. M.'s XXIst Regiment N. I. (Marine Battalion).

¹⁰ Gov. List of Civil Forts, 1862.

no complete line of outworks, only one or two covered ways leading down to batteries.¹ The fort walls, built of stone and mortar, are very strong about twenty feet high and eight thick, with, at some distance from each other, twelve bastions, until very lately armed with cannon. South of the fort is a deep trench eighteen feet broad. There are two doors, one to the east, the other to the west. On either side of the west door is a guardroom. The interior of the fort, once full of buildings, still has traces of small houses. There are also three wells with a plentiful supply of water. Near the wells is a building said to have been the storeroom, close to it a granary, and at a little distance the governor's palace. Till 1829, when it was abandoned and the troops moved to Dápoli, the fort was garrisoned by a small force of two officers and 200 native soldiers. In 1862 it had no garrison and only eighty-eight old unserviceable guns.²

Anjarla, a small port at the mouth of the Jog river, about three miles south of Áde and two north of Suvarndurg, had, in 1872, a population of 1952 souls. The trade is in the hands of a few local merchants. Anjarla was probably never a place of consequence. In 1819 it had some trade in salt, fish, and corn.³ Most of the present population, belonging to the upper classes, *pándharpeshás*, live in well built and tiled houses standing in dense cocoa groves.

Bá'gma'ndla, a large fishing village in the Dápoli sub-division on the north bank of the Sávitri opposite Bánkot, had, in 1872, a population of 2829 souls. This village together with the adjoining village of Kolmándla, one-half of which belongs to the Habshi of Janjira, is the only part of Ratnágiri that lies north of the Sávitri. It has no trade, and being surrounded on three sides by great mud swamps, is unhealthy. Bágmándla was one of the ten Bánkot villages ceded to the British in 1756. Bágmándla and Kolmándla are probably the remains of Mándal, or Mándan, an old trading place of some consequence. Barbosa (1514) has a Mandabad at the mouth of the Bánkot river, where many ships, especially from Malabár, came taking stuffs and leaving cocoanuts, areca nuts, a few spices, copper, and quicksilver.⁴ The name and position suggest that it may be the site of Mandagora mentioned both by Ptolemy (150) and in the Periplus (247).⁵

Bahiravgad Fort, high and hard to reach, on a spur of the Sahyádris in Chiplun, covers an area of about eight acres of very broken, rocky and brushwood-covered ground. In 1862 the walls were ruinous and there were only four old unserviceable guns. There was no garrison, water was abundant but provisions were scarce.⁶

Bahiravgad Fort, on the top of the Sahyádris in the Devgad village of Digavle, is between four and five acres in area. In 1862 there were no walls or bastions, no garrison, and no water.⁷

Chapter XIV. Places of Interest.

ANJANVEL.
Fort.

ANJARLA.

BÁGMÁNDLA.

BAHIRAVGAD.

BAHIRAVGAD.

¹ Nairne's MS.

² Gov. List of Civil Forts, 1862.

³ Collector to Gov. 15th July 1819; *Reyn. Rev. Diaries*, 142 of 1819, 2573.

⁴ Standley's *Barbosa*, 71.

⁵ See below, p. 352.

⁶ Gov. List of Civil Forts, 1862.

⁷ Gov. List of Civil Forts, 1862.

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Places of Interest.

BÁLÁPÍR.

Ba'la'pir, on the top of a conical hill about half a mile from Dábhól creek and four miles north-east of Dábhól, has a ruined mosque and a shrine¹ of soft red laterite both domed, very simple, and of rough workmanship. In the tomb are three graves without any inscriptions, and in the enclosure outside are three more. An endowment, originally granted by the Habshi about the year 1650, and continued by Ángria and the Peshwa, has been (1874) confirmed by the British. Of the date of the buildings there is no trace. The Habshi's grants show that they must be at least as old as the beginning of the eighteenth century, and their battered weatherworn stones seem to point to a much greater age. The ruined step well in the plateau of the hill top is said to be the quarry from which the stones for the mosque were cut.

BANDAR SÁKHRI
MOSQUE.

Bandar Sa'khri, a landing place two miles north-east of Dábhól, has, on a reclaimed piece of ground on the left bank of the Váshishti, a very simple ruined black stone building known as the Jáma, or Amina, mosque. Its age is not known, but from a paper about the appointment of a warden, the building must be as old as the beginning of the seventeenth century (1624). It was probably built by one of a family of Kháns who formerly held several villages in the neighbourhood. To the east and west of Sákhrí, in the villages of Kothamba and Máji Tentla, are two other mosques, and on a hill close by, a step well called the horse well, *ghodbáv*, seemingly of the same age as the mosques.

BÁNKOT.

Ba'nkot, or **Fort Victoria**, north latitude 17° 75' and east longitude 73° 2', with, in 1872, 3763 inhabitants, is next to the island of Bombay the earliest English possession in Western India. Bánkot lies at the foot of a rocky headland in the extreme north of the district on the south shore of the entrance to the Bánkot or Sávitrí river,² seventy-three miles south-east of Bombay.³ A mile outside of the village, and two miles south-west of Fort Victoria, the bar of the Bánkot river, with a narrow channel on its south-east side, stands nine feet deep at low water. Though well buoyed, the bar is much exposed even in the fine season (September-June), and should not be passed without a pilot.⁴ Bánkot, though closed during the south-west monsoon, opens earlier and remains open longer than most Ratnágiri ports. The river is, for vessels of sixteen feet draught, navigable eighteen miles to Mahápral in Dápoli, and for vessels drawing seven feet ten miles further to Mahád in Kolába.

¹ The story of the shrine is that a Deccani Váni named Bálásheth, becoming a Musalmán, let loose a bull, and vowed to build a mosque wherever the bull stopped. The bull stopped on the top of the hill, and the Váni built a mosque and a tomb. The graves in the tomb are those of the builder, his wife and his child, and those outside are raised over his horse and bull.

² It seems possible that the Sávitrí is Ptolemy's Nanaguna, which in his map enters the Arabian Sea within Ratnágiri limits. Nanaguna should perhaps be Nana Ganga, or the little Ganga, a name naturally applied to the Sávitrí, as it is a small stream compared with the other Mahábaleshvar gangás, the Krishna, Vena, and Koyna.

³ The name Bánkot, given to the fort by the Marathás, was in time extended to the settlement, *path*, at the foot of the hill. Velás, the original village, on the coast two miles south of the fort, is inhabited chiefly by Hindus, as Bankot is by Musalmáns.

⁴ Taylor's Sailing Directory, 386.

Trade has long left Bānkot. It is now little more than a large fishing village. A few cocoanuts, betelnuts, and grafted mangoes, and small quantities of salt fish, and fins and maws are exported. A few resident shopkeepers supply the people with cloth, grain, and groceries. Bānkot has no manufactures, but at Bāgmāndla on the north bank of the creek, a few Sālis find employment in weaving coarse cotton cloth.

Chiefly from crowding and bad drainage, Bānkot had for many years a bad name for fever. Latterly sickness has much decreased. The water supply is scanty, and an attempt to bring water from a spring in the hill above through a small iron pipe has failed. At Velás, a few miles south of Bānkot, are the remains of a masonry aqueduct of considerable length said to have been built by Nāna Fadnis (1720 - 1800).

Bānkot does not seem to have ever been a place of importance.¹ In 1540 Dom João de Castro, under the name Beigoim, describes the Bānkot river with great detail. It took its name Beigoim from a town on the south bank about a league from the river mouth. Ships went there to load wheat and many other kinds of food, and had its harbour not been so difficult, it would have been one of the first places on the coast.² In 1548, with other Bijápur coast towns,³ it was destroyed by the Portuguese. No further reference has been traced till, on 8th April 1755, five days after the fall of Suvarndurg, Commodore James arrived off Bānkot. The fort surrendered on the first summons. Commodore James handed over charge to the Maráthás, and at the end of the rains (October), the fort and nine neighbouring villages⁴ were ceded to the British and its name changed from Himmatgad to Fort Victoria.⁵ To the English Bānkot was chiefly valuable as a place from which Bombay Europeans and Musalmáns might be supplied with beef. There was also the hope that its once considerable trade would revive. It proved very serviceable in providing hemp ropes, then much in demand for lashing cotton bales. But its trade remained very small, and the place was a burden, with, in 1787, a cost of £3500 (Rs. 35,000) and an income of £1200 (Rs. 12,000).⁶ In 1812 the neighbouring native governments were so oppressive that the population of Bānkot might have increased to overflowing. As it was, the numbers doubled within ten years, and nothing but the want of fresh water prevented a much greater increase. Several wells were dug and ponds

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BANKOT.
Trade.

*Water and
Climate.*

History.

¹ The Chinese traveller Hiouan Thsang (640) is supposed to have embarked at Bānkot. The identification is doubtful. Nairne's Konkan, 10.

² Primeiro Rotero da Costa da India, 41. He says the river is also called the Mahád river from a large town of that name, and the Honey river from the quantity of honey found on its banks. Beigoim would seem to be a corruption of Velas.

³ Grant Duff, I. 76-78.

⁴ The nine villages were: Velas, Veshvi, Bāgmāndla, Shipola, Kuduk, Panderi, Peva, Kumbbla, and Dāsgaon.

⁵ Nairne's Konkan, 92.

⁶ According to Howe (December 1788), the fort was costing the Company about £10,000 a year. At the same time, he says, the chiefs commonly retire after a few years with immense sums, and it is calculated as good a post as the Bombay council. Bom. Gov. Sel. XVI. 193.

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BANKOT.

History.

repaired, and every spot of arable land was made the most of. But as great part was bare rock the settlement never yielded much agricultural wealth. Many of the people, keeping their families and property in British villages, earned their living by tilling lands in the neighbouring Marátha territories. Bānkot never became a place of trade. The country inland was rugged and difficult, and as vessels of about twenty tons (70-80 *khundis*) could at that time easily pass up the river, the whole traffic centred at Mahād.¹ In 1818, on the final conquest of the Konkan, a detachment of British troops was for a time stationed at Bānkot, and it was made the head-quarters of the collectorate. In 1822 the station was broken up and the head-quarters moved to Ratnágiri. Bānkot was then made a sub-divisional station under a *māmlatdār*. Subsequently, in 1837, the *māmlatdār* was removed and Bānkot was placed under a *mahālkari*. The place proved so unhealthy that it was given up, and the *mahālkari*'s head-quarters were changed to Mandangad where they now are.

Objects.

On a high red hill covered with low bushes, stands the old, now much ruined fort, small and square, with bastions like those of many an English river mouth or harbour fort. Round the walls on the land side is a ditch. There are two separate bastions connected with the fort. One of these called the Refuge, *Panāh*, bastion was built by the Habihi to guard the creek. The other bastion, higher up the hill and approached from the water bastion by 300 steps, was built by the Angriās. From this second bastion a further ascent of about 700 steps leads to the fort. Both bastions are now in ruins, but there are still the remains of a covered path. The fort was in 1862 in good order except part of the outer wall on the western side. It had no garrison and only a scanty supply of water.² There are also the foundations of several good European dwellings with the remains of gardens and several tombs. One tomb, dated 1803, is to Mrs. Kennedy the grandmother of Mrs. Malet who is buried close by beneath an Ionic column with the following inscription: 'Here lie the remains of Mary Sophia Malet aged 26, and Ellen Harriet aged 32 days, the beloved wife and daughter of Arthur Malet of the Bombay Civil Service. They with thirteen boatmen and attendants were drowned on the bar of the river Sāvitrī, on the night of the 6th December 1853.'³

To the north of Hareshyar, the round hill across the river is a rather famous but architecturally commonplace temple. Not far from the temple stands a large garden house and lake made by the wife of one of the Janjira chiefs. In Velas are two temples dedicated to Shri Rāmeshvar and Kālbbhairav built respectively by

¹ In 1818, so safe was its navigation that on the occasion of the attack on the strong fortress of Mandangad, the Prince of Wales' Cruise and Sylph Brig went twelve miles up the river and might easily have gone further. Collector to Gov. 15th July 1819; Rev. Diaries 112 of 1819, 2573.

² Gov. List of Civil Ports, 1862.

³ C. N. B. (1763) states that close to Bānkot was a very large rock temple divided into twenty-five chambers (Pinkerton Voyages, IX 209). This was probably either the Mahād or the Janjira caves.

Moroba Dáda Fadnis and Nána Fadnis (1720-1866). The chief Bānkot buildings are the custom house, the travellers' bungalow on the hill overlooking the harbour entrance, and the residences of the Pārkaras, a distinguished Muhammadan family who enjoy grants of land from Government as rewards for faithful services in collecting supplies for the fourth Mysor (1799) war.

Coasting steamers call daily during the fair season. Close to the landing stage, a floating bridge of boats, is a roomy rest-house.

Bharatgad Fort, on the south shore of the Kálávali creek, on a hill commanding the Málvan village of Masura, has an area of between five and six acres. The inside of the citadel is an oblong of 105 yards by sixty. The citadel walls are about seventeen or eighteen feet high and five feet thick. At the opposite ends of a diagonal running north and south are outstanding round towers. Within the citadel, about a quarter of its whole length from the north end, is a square watch tower reached by steps. Close to the north tower is a small temple, and near it is a great well about 228 feet deep, cut through solid rock. About seventeen yards from each side and 100 yards from each end of this citadel, is an outer wall with nine or ten semi-circular towers. The wall is ten or twelve feet thick with an outer ditch. It is not very strong and seems to have been built without mortar. In 1862 the walls were in fair order, there was no garrison, and water and provisions were abundant. There were eighteen old and unserviceable guns.¹ The fort has constantly changed hands. In 1670 Shiváji surveyed the hill, but finding no water, would not fortify it. Ten years later (1680) Phond Sávant, fearful of its falling into the hands of a chief named Bávdekar, cut the great well through the rock, and finding water, built the fort (1701).²

Bhavangad Fort, on rising ground close to the village of Chikhli in Sangameshvar sub-division, is a small fort not more than half an acre in area. It has no garrison and no water. In 1862 it was very ruinous and had only one old and unserviceable gun.³

Bhagvantgad Fort, on a high hill in the Málvan sub-division across the creek from Bharatgad, has an area of about one and a half acres. In 1862 the walls were nearly in ruin, there was no garrison, no water, and only scanty supplies. There were fourteen old and unserviceable guns.⁴ In a temple is a sacred stone, a pointed rock jutting through the floor, and apparently the peak of the hill. The fort was built about the same time as Bharatgad Fort (1701), by Bávdekar the rival of Phond Sávant. After some resistance it was taken by Colonel Imlack in 1818 (April-May).⁵

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Places of Interest.

BANKOT.

BHARATGAD.

BHAVANGAD.

BHAGVANTGAD.

¹ Gov. List of Civil Forts, 1862.

² Captain Hutchinson (Memor. on the Savantvadi State, 156) mentions a report that after a few shots from the fort guns, the water of the well disappears. In support of the truth of this story he notices that the garrison had wooden water tanks. But with so deep a well, even without a leak, it would be useful to have a store of water at the mouth of the well. Mr. R. B. Worthington.

³ Gov. List of Civil Forts, 1862.

⁴ Gov. List of Civil Forts, 1862.

⁵ As. Jan., VI. 320. The particulars of the capture are thus detailed: "A detachment of the 14th Rifle, arriving on the 29th of March, was during the night employed in raising batteries which were opened the next morning at daybreak. As it

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BORIA OR ADUR.

Boria or **Adur**, a small port in the Chiplun sub-division, midway between the mouths of the Váshishtī and Shástri rivers, had, in 1872, 2351 people. Protected by the bold and conspicuous headland of Adur, 360 feet above sea level, it is a safe anchorage during northerly gales. In former years a place of call for coasting steamers, it has now a trade, for the five years ending 1877-78, valued at £5221 2s. (Rs. 52,211) of which £2195 12s. (Rs. 24,956) represented exports and £2728 10s. (Rs. 27,285) imports. On the top of the hill, overlooking the bay, is a trigonometrical survey station.

BURNI ISLANDS.
BURONDI.

Burnt Islands.—*See* Vengurla.

Burondi, a small port and fishing village in Dápoli, with, in 1872, 2847 people, lying about six miles south of Harnai, is joined with Dápoli by a good bullock road. A yearly fair in honour of Durgádevi, held in *Chaitra* (April-May), is attended by from 1800 to 2000 persons.

CHIPLUN.

Chiplun, north latitude $17^{\circ} 30'$ and east longitude $73^{\circ} 36'$, the chief town of the Chiplun sub-division, with, in 1872, 6971 people, is situated 108 miles south-east of Bombay and twenty-five miles from the sea, on the south bank of the Váshishtī river, which, up to Govalkot, one and a half miles from Chiplun, is navigable for boats of about fifteen tons.¹ Of 6971, the total (1872) population, 4334 were Hindus, 1736 Musalmáns, and one was a Christian.²

Population.

Trade.

At the head of a navigable river and near the entrance to the Kumbhárli pass one of the easiest routes from the Deccan to the sea, Chiplun must always have been a centre of trade. Of late, by the opening of a cart road through the pass, traffic has much increased. Its leading merchants are local Bráhmans and Bhátíás, with, in the fair season, a few agents of Bombay firms. All goods passing through Chiplun are, in the first instance, consigned to local merchants in accordance with orders given by them to their correspondents in Bombay or the Deccan. Bulk is broken on arrival, and the goods are sold in large or small lots to the petty dealers and agents of Bombay firms. After changing hands, most of the imports are, in the course of two or three months, again exported. The chief articles received from the Deccan are, cotton, molasses, clarified butter, oil, grain, turmeric, and chillies; and from Bombay, most of them to be sent on to the Deccan, are piece

was found impossible to effect a breach here. The river, two columns of the detachment under the command of Captain Grey and Pearson, were ordered to cross at different places to take the place by a sally. The garrison, on seeing that the troops had crossed, abandoned the fort. It was taken about ten o'clock on that day. Service Record of H. M. S. 14th Rifles, 22.

¹ At Govalkot about twenty years ago stone quays were built for loading and discharging cargo. From Govalkot to Chiplun, one and a half miles, runs a narrow tidal gullet, up which only flat-bottomed boats can work. At the head of the Chiplun market a pier, made soon after the territory was gained by the British. Owing to the drying of the creek it is now little used, most of the traffic being carried by carts to the Govalkot wharves.

² Of 4334 the total Hindu population, 806 were Brahmins, 915 Amins, 462 Musalmáns, 582 Emins, 188 Jains, 122 Potters, 121 Goldsmiths, and 199 others. The rest (1127) come under the head of Others.

goods, metals, and other miscellaneous articles. In ordinary years little or no grain travels east. But in the 1877 famine about 25,000 tons went from Bombay to the Deccan through the Kumbhārli pass. During the busy season, February to May, from 300 to 400 carts pass daily into Chiplun by this route. The merchants deal in every kind of goods, but never largely in any particular commodity. The trade is carried on in the fair season only. During these months (November-June) every empty space near the market or the landing place, and even in the river bed is covered by sheds or booths. This large trading camp is broken up on the first sign of the south-west monsoon, and during the rains almost the whole site is flooded. The special fair-weather trading population is estimated at about 5000.

The making of a coarse household pottery and leather-covered baskets, *petáris*, or native travelling trunks, are the only industries.

The town, with a subordinate judge's court and a post and sea custom office, is a sub-divisional revenue and police head-quarter station. Made a town municipality in 1876, Chiplun had, in 1879, from octroi duties and a house tax, an income of £190 (Rs. 1900). Since 1873, good roads have been made, an efficient conservancy establishment maintained, and the streets lighted. The chief want is drinking water. Private wells are few, and from the hardness of the rock and the low level of the water, they are costly. A stream that runs through the town is every year dammed to provide water for the droves of cattle, and a large well has been built for the use of the traders who throng the town during the fair season. Still by the end of April the cattle pond and most of the wells are dry, distress is severe, and the cattle have to be driven two miles up the river to be watered. At Govalkot the want of water is still more serious. After March there is no water, and the numerous native craft have to bring their supplies partly by boat and partly by headloads over the rice fields, from a spring some three miles distant. During the famine year (1877) the municipality was forced to keep water carriers at Govalkot to supply the native shipping.¹ Disastrous fires mainly owing to want of water are also common. To remedy this the municipality is, with the aid of public subscription, now making large water works. The head works are a solid masonry dam thrown across the bed of a river some three miles south of the town. The dam has five sluices and an outlet pipe. The main aqueduct, leading to the service reservoir to be built close to the town, is to be a covered masonry channel. From the reservoir the water will be distributed to all parts of the town by iron mains, and crossing the bed of the Vashliti a branch pipe will be taken to Govalkot, and a cattle watering place with numerous troughs provided. At a total cost of about £6000 (Rs. 60,000) an abundant supply is expected. The head works are already far advanced.

Chiplun, the first home of the Konkanaśh or Chitpavan Brahmans, according to local tradition stocked with Brahmans and supplied

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CHIPLEN.
Trade.

Manufactures.

Management.

History.

¹ Letter of Collector to Commissioner S. D. 122 of 1879

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CHIPLUN.
History.

with sixty ponds and sixty gardens by Parashurám the reclamer of the Konkan, has for long been a place of consequence.¹ In the seventeenth century it was a great village, very populous and plentifully stored with all provisions.² In 1818 it was taken by a body of Rámoshis, but abandoned by them on Colonel Kennedy's approach.³ In 1819 it was an insignificant village, but bid fair to be, Rájápúr excepted, one of the chief trade centres of the southern Konkan. During the dry season Vanjáris, Vánis, and a few Pársis, came, set up temporary booths, and left when the rains fell.⁴ In 1821 it is spoken of as a place of very important trade.⁵ In 1826, Chiplun was a considerable town. The river was navigable for boats of about eight tons (30 *khandis*) close to, and for boats of about fifteen tons (60 *khandis*) within three miles of, the town.⁶ The building now used as a Government office was made as a rest-house for Bájiráy Peshwa, who for several years (1812-1815) came down the Kumbhárh pass to visit his palace at Guhágár near Dhábol.⁷

*Rock
Temples.*

About a quarter of a mile south of the town is a series of rock temples. Of these the chief is a tolerably large hall twenty-two feet long by fifteen broad and ten high, with, at its inner end, a Buddhist relic shrine, *dághoba*. There are also two or three smaller caves, and a deep thirteen feet square pond. Three stages on the road from Chiplun to Karhád in Sátára is another series of Buddhist caves, consisting of a room with a small round relic shrine, six feet in diameter, and a hall, *shála*, nineteen feet by eighteen, with a raised seat at one corner and three recesses at the inner end.⁸

*Govalkot
Fort.*

At Chiplun on a detached hill commanding the creek, and surrounded on nearly all sides by higher hills, is the fort of Govalkot. This is said to have, at different times, belonged to the Habshi, Angria, and the Peshwa, and Angria is said to have besieged it for twelve years. At the top of the fort is a fine reservoir.⁹

Of the sixty legendary ponds dug by Parashurám, the only traces left are eight reservoirs in various parts of the town. The only pond of any size is the Rám Tirth to the east of the town. There is a small temple and rest-house close by, and the banks are used as a burning ground.

DA'BOH.

Da'boh,¹⁰ north latitude 17° 34' and east longitude 73° 16', a small straggling town with, in 1872, 3980 people, lies six miles from the sea, at the foot of the hills on the north bank of the Anjanvel or Váshishiti river, eighty-five miles south-east of Bombay.

¹ A stone has lately been found at Chiplun bearing the date 1156 (1078 S.). Bom. A. Soc. Meeting, September 1879.

² Orléans (1670) *Vila*, V. 247.

³ Narine's Konkan, 116.

⁴ Collector to Gov. 15th July 1819, Rev. Diaries 112 of 1819, 2575.

⁵ Bom. Rev. Rec. 16 of 1821-638.

⁶ Clune's Itinerary, 38.

⁷ Narine's Konkan, 121.

⁸ Journ. Bom. Royal A. Soc. IV, 342.

⁹ Narine's MS. notes.

¹⁰ According to a local saying, Dabhol once bore the name of Amaravati or the abode of the gods. The present name is, and is said to be, a short name of Dabholavati and hence given to it from the still remaining temple of Shiva Dabhol Deva, or to be a corrupt form of *Darbha* according to the *Purana*, a god-inhabited forest. Mr. A. F. Crawford MS.

Some details of the entrance to Dábhól are given under the head "Anjanvel." The site of Dábhól, a narrow strip of land between the river and very high steep hills, is ill suited for a large town.¹ If it ever was as populous as is stated, the buildings must have stretched three or four miles up the river.

Dábhól is connected by a bullock road with Dápoli, twelve miles north. Coasting steamers call daily during the fair season, and up the Váshishti, in connection with the service to Bombay, a small steam launch takes passengers to and from Govalkot, the landing place for Chiplun. At Dábhól a steamer landing place, a floating platform raised on boats, has been built, and some old cells attached to the outer or north wall of the mosque serve as passenger rest-houses. Except betelnuts sent in small quantities to Bombay there is no trade. Weaving is the only industry. There is a post office and a police station, but no public buildings. The population is very mixed. The houses of the well-to-do are substantial and enclosed in rich gardens, the fishers' huts are poor, crowded and dirty. The town is fairly supplied with water.

Though it has long been of no consequence, Dábhól would seem to be a settlement of very great age.¹ It was one of the places destroyed by Malik Káfur in 1312.² About fifty years later (1357) it is again spoken of as the western limit of the Bahmani dominions. In the fifteenth century, during the prosperous times of the Bahmani kings, Dábhól was the centre of a great trade. In 1459 (864 H.) Yusuf Ádil Khán, a son of Murád II., Sultán of Constantinople, afterwards the founder of the Bijápur Ádil Sháhi dynasty, describes it as possessing the delights of paradise,³ and under the name of Mustafabad or Khizrabád, it is mentioned as one of the great towns of the Bahmani king Sultán Mahmud II. (1482-1518), where, with ample funds, he established orphan schools.⁴ About 1470, the Russian traveller Athanasius Nikitin (1468-1474), found it a large town and extensive sea port, the head of a large district where horses were brought from Mysor, Arabia, Khorásán, and Nighostán, and all nations living along the coast of India and Ethiopia met.⁵ In 1478 it was taken by Bahádur Khán Giláni, the

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DABHOL.

Trade.

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¹ Large remains, several feet under ground, seem to show that Dabhol was in a very early times a place of consequence. An under-ground temple of Chandikadevi is said to be of the same age as the Bahami rock-temples (A.D. 550-578). Mr. Crawford's MS. A local history, *bakhar*, states that in the eleventh century, Dabhol was the seat of a powerful Jam ruler, and a stone writing has been found bearing date 1156 (3d *Furshah* 1078 Shalivahan).

Briggs' *Pershistia*, I. 379. According to a Persian history, now in the library of the Jampra Nawab, Dabhol was, about the middle of the thirteenth century, taken by a certain Sháh Nasir-ul-Din or Azim Khan who came to Ráhnagar from beyond seas. The Hindu chief Nagojray, attacking them both by land and sea, tried to drive off the strangers. The attack failed, and after one of Azim Khan's sons, Dabhol was called Mustafabad and another settlement was, after a second son, named Hamzabad. Mr. Crawford's MS. It seems probable that this local history is incorrect in its dates, and that the Musalman governors, after whom Dabhol and other places near it are named, were officers of the Bahmani (1347-1500) and Bijapur (1500-1600) courts.

² *Persian Furshita*, II. 3, Scott, I. 209.

³ *Persian Furshita*, I. 578; Briggs, II. 543, Scott, I. 56, 57.

⁴ Major's *India in the XVth Century*, 29-30. Mysor should perhaps be *Misr*, Egypt.

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DABHOL.

History.

Dabhol.

son of the Governor of Goa,¹ who tried to establish himself as an independent ruler. On the complaint of Mahmud Begada (1459-1511), Sultán of Gujarát, whose ships Bahádúr had plundered, Mahmud Bahmaní attacked and slew him (1491),² and visiting Dábhól, sailed along the coast.

In 1500, about ten years after the new Deccan dynasties rose (1489), to power, Dábhól fell to Bijápur, and was made the head-quarters of a district very closely corresponding to the present Ratnágiri.³ At the beginning of the sixteenth century two influences depressed Dábhól. By the transfer of the head-quarters of power from Bedar to Bijápur the direct line of traffic from the coast was moved south of Dábhól, and its position, so close to the coast, made specially open to the attacks of the Portuguese, the enemies of the Bijápur kings. Varthema, in 1503, speaks of it as extremely good, surrounded by walls in the European fashion, containing great numbers of Moorish merchants and governed by a pagan king, a great observer of justice.⁴ In 1508, Dábhól was one of the most noted coast towns with a considerable trade and stately and magnificent buildings, girt with a wall, surrounded by country houses, and fortified by a strong castle garrisoned by 6000 men of whom 500 were Turks.⁵ Against it, the Portuguese Viceroy, Admiral Dom Francisco d'Almeida, came (12th November 1508) with nineteen vessels, carrying 1300 Portuguese soldiers and marines and 400 Malabár seamen, and under cover of a false attack, landed at some distance. The resistance was vigorous; 'Piles of dead strengthened the barrier of the city palisades'. But the assailants pressed on, scaled the ramparts, and entering the city, plundered it, razed it to the ground, and reduced it to ashes, putting to death men, women, and children.⁶ Those who escaped came back, and restored the city so that in a few years it was inhabited as before.⁷ In 1514 it was defended by a rampart and artillery, and was a place of great trade

¹ Nairne's Konkan, 27.

² Persian Ferishta, I. 715-719; Scott, I. 191-194; Briggs' Ferishta, II. 513. Ferishta gives the date 1494 (900 H.). According to the Gujarati historians Bahádúr was taken alive and his head cut off and sent to Mahmud Begada. Watson's Gujarati, 44, 45.

³ Jervis' Konkan, 75. According to one account (Mr. Dunlop, Bom. Rev. Rec. 121 of 1819, 2526) Dabhol was called Mustafabad after a certain Mustafa Khan, a Bijapur officer, who, in 1495 (903 H.), rounded the town and appointed district and village officers. This is incorrect, as under the Bahmanis, Dabhol was known as Mustafabad. See above, p. 327.

⁴ Balzer's Varthema, 115.

⁵ Faria-y-Suza, in Kerr's Voyages, VI. 115. De Barros (1550-1579) mentions it as a place of great commerce, full of noble houses, fine buildings, superb temples, and old mosques (V. 266). (Compare also De Couto, VI. 419, VII. 289, and Mickle's Lusad, X.) Dom Joao de Castro (1538) says the defences were slight and the Musalman garrison only 1000 strong. Before it was pillaged by the Portuguese, Dabhol was, he says, a very large and noble settlement, the emporium of all India, thronged by Persians, Arabs, and traders from Cambay. Vida de J. Castro, 264-269; Prim. Rot. da Costa da India, 136.

⁶ Da Cunha's Chaul, 30, the wrath of the Feringi as it fell on Dábhól became a proverb. Baldon, 1660 (Churchill, III. 540), says that most of the booty was afterwards destroyed by fire. Faria-y-Suza notices that preserved bones were found by the Portuguese and much liked by them. They tasted not unlike shrimps.

⁷ Stanley's Barbosa, 72.

with many resident, Moor, Gentile, and Gujarát merchants, and large fleets of Moorish ships from Makka, Aden, and Ormuz, and from Cambay, Diu, and Malabár. The imports were much copper, quicksilver, vermillion, and horses; the exports were great quantities of country fabrics, wheat, and vegetables.¹ In 1520 Ismáíl Ádil Sháh (1510-1534) offered the Portuguese a friendly alliance if they would protect the import of horses into Dábhól.² To this the Portuguese seem not to have agreed and two years later (1522) Dábhól was again sacked. From this sacking it soon recovered, and in 1540 was a great city with the largest concourse of merchants of the whole Indian ocean, thronged with people from all parts of the world.³ Seven years later it had only 4000 inhabitants, two forts and some redoubts. In that year it was destroyed by the Portuguese who took the upper town some way from the sea.⁴

In the following year (1548) a treaty was made between Bijápur and the Portuguese. The Portuguese promised to send a factor to Dábhól to give passports to merchants and others wanting to go to sea and to try their best to people and enrich Dábhól.⁵ In 1554 the Portuguese refused to pay the sum agreed on for the privilege of granting sea passports at Dábhól, and in 1555, and again in 1557, they pillaged Dábhól.⁶ In 1570 the Gujarát historians speak of Dábhól as one of the European ports.⁷ But it is doubtful if the Portuguese ever held it. If they did, they kept it only for a few years, as early in the seventeenth century (1611) Middleton found the governor a Sidi, friendly, offering presents and free trade. Still the place was disappointing. The people 'made a noise of' fine cloth, indigo, and pepper, but none was forthcoming, and all they took was some broadcloth, kerseys, and lead bars.⁸ In 1616, in consequence of Middleton's honourable treatment of the Mokha junk, the governor of Dábhól offered the English free trade, and as their position in Surat was most uncomfortable, they thought of removing to Dábhól. In 1618 the English made a further attempt to trade,⁹ and in 1624, again proposed to move to Dábhól from Surat.¹⁰ At first they were

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DÁBHOŁ.

History.

¹ Stanley's Barbosa, 72.

² Lassen's Ind. Alt. IV. 198.

³ Dom João de Castro, Primeiro Roteiro da Costa da Índia, 39.

⁴ Vida de João Castro, 264-269.

⁵ Col. de Mon. Ined. V. 1-43. The Portuguese for some years (1547-1554) seem to have paid £154 (2000 gold *pardaos*) a year for the privilege of granting passports. Ditto, 244.

⁶ Nairne's Konkan, 143. Faria-y Suza in Kerr's Voyages, VI. 192. In 1571 the Portuguese made another attack on Dabhol. But the governor, Khāja Ali Shirazi, having heard of their intentions, let them land and put to death upwards of 150 of them. Briggs' Ferishta, IV. 540.

⁷ Burd's Mirát-i-Ahmadi, 129.

⁸ Middleton in Harris, I. 107. About the same time (1611) Captain Sans speaks of selling iron, ivory, and indigo (Harris, I. 119), and Captain Peyton (1615) notices that the Portuguese had a factory but no fort (Harris, I. 155). How important a place of trade Dabhol was, appears from the fact that one of its ships the Mahmudi, 136 feet long 41 broad and 29½ deep, was of 1200 tons burden. Orme's Hist. Frag. 325.

⁹ Milburn's Oriental Commerce, XVII.

¹⁰ Bruce's Annals, I. 261-274.

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DÁBHOL.
History.

received by the Dábhól people with much honour. Then a scuffle arose and the English took to their guns and set fire to the town. The people fled, but encouraged by a Portuguese factor and some others, came back and drove the English to their ships.¹ Ten years later (1634) they asked if they might start a factory, but probably because of the former disturbance were refused.² In 1639 Mandelslo describes the Dábhól fortifications as in ruins, without walls or gates, defended on the river side by two batteries; the entrance, none of the best by reason of a sand bank at the mouth, was dry at low water. The people were Vánis and Musalmáns, and the chief trade was in salt and pepper. Instead of the fleets it used to send to the Persian Gulf and the Red Sea, there were only a few wretched boats trading with Gombrun.³

In 1660, and again in 1661, Dábhól was burnt by Shiváji, and in 1662 it was wrested from the Moghals and made a part of Shiváji's kingdom.⁴ Thevenot about this time (1660) described it as an old city, with low houses and few fortifications.⁵ In 1670 Father Navaritte spoke of it as a strong and handsome fort belonging to Shiváji.⁶ In 1695 Gemelli Careri passed it almost without notice. Shortly after (1697) it was granted to the Shirke family.⁷ From 1700 to 1744, under the joint government of the Habshi and the Maráthás, Dábhól is described as an old place, deserted by trade, where the English once had a factory. About this time Tuláji Angria took it, and driving out the Habshi governed it for eleven years. It was then (1755) taken by the Peshwa,⁸ and held by him till, without a struggle, it was, in 1818, handed over to the British.

Remains.

Except in the hills, where there seem to have been a round tower or two, there are no signs of fortifications. Of Musalmán remains the chief is, close to the sea and almost buried in cocoanut trees, a handsome mosque sixty-three by fifty-four feet in its inner measurements, with minarets and a dome about seventy-five feet high. The style is like that of the chief Bijápur mosques. It is on all sides enclosed by a stone wall and approached by a broad flight of steps. In the centre of the stone terrace, in front of the mosque, is a well and a fountain. The mosque is said to have been built in 1659 by a Bijápur princess, Áisha Bibi, popularly known as lady

¹ De La Valle's Letters, III. 130. Three years later (1626) Herbert describes the town as with low houses terraced at the top, and with nothing to boast of but an old castle and a few temples. Nanne in Ind. Ant. III. 102.

² Bruce's Annals, I. 334. Mr. Nanne thinks that no factory was ever established, Konkan 118.

³ Mandelslo in Harris, II. 130, and Voyages, 220. The salt was said to come from Oranubannera perhaps Uran-Bombay.

⁴ Grant Duff, 80, 83.

⁵ Voyages, V. 249. Of the town Ogilby (1670) gives the following details: Anciently very famous, Dábhól is now much ruined by wars and decreased in trade. It is open only on the south side which fronts the water where are two batteries with four iron guns. On the mountains are several decayed fortresses and an ancient castle without guns or garrison. On the north point is a little wood, at a distance like a fort, and below the wood, near the water, a white temple. On the south point is another temple and several stately edifices. Atlas, V. 247.

⁶ Ome's Hist. Frag. 206.

⁷ Nanne in Ind. Ant. II. 280.

⁸ Bānkot Princes in Nanne's Konkan 92.

mother, *ma sáhibah*. The real date is probably much earlier.¹ Dábhól has also a Jáma mosque built in 1619 (1059 H.) in the beginning of Aurangzeb's reign, by Pir Ahmad Abd-ulláh the chief officer, *subhádár*, of the district.² On the sea face of a third mosque a writing has lately (1879) been found cut in wood. It begins with the usual Shia blessing of the Prophet, his daughter, and the twelve Imáms, and ends 'May God help Saádat Ali, king of kings, who raised this building in 1558 (987 H.).'³ There is also a cenotaph, *mukbím*, of Khája Khizr the Prophet Elias, bearing the date 1579 (987 H.), and a tomb of Ázamkhánpir.

Da'poli, the head-quarters of the Dápoli sub-division, with, in 1872, 2595 people, stands on an open plain, about eight miles south-east of Harnai and seventeen north-west of Khed. The camp or, as it used to be, cantonment, is formed out of part of the lands of the four villages of Dápoli, Ginhavna, Jogla, and Jálgaon. In 1818 Dápoli was fixed as the military station of the southern Konkan. In 1840 the regular troops were withdrawn. A veteran battalion was kept till 1857, and when this also was abolished,⁴ the cantonment was broken up and Dápoli has since been of no importance. The climate is throughout the year cool, healthy, and free from epidemic disease. The camp and market are well supplied with drinking water. Except a few articles brought for local use from Harnai and Khed there is no trade. A small well kept market contains native groceries and miscellaneous articles, and a Pársi and a Portuguese shop supply the wants of the European residents. The native population, many of them military pensioners, is mixed, Hindus, Muhammadans, and a few Jews. In the neighbouring village of Jálgaon, several wealthy Bráhmans and Gujars, living in substantial houses, carry on an extensive money-lending business with the rural population. Dápoli has no manufactures. Good coarse pottery and coarse cotton cloth are made at Jálgaon, and a few good carpenters, smiths, and shoemakers, trained in bygone days remain.

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DÁBHOL.
Remains.

DÁPOLI.

¹ The local account is that the princess, with a retinue of 20,000 horse, arrived at Dábhól intending to go to Makka, but was kept back from fear of pirates. Determining to spend on some religious work the £150,000 (Rs. 15,00,000) she had with her, she, with the advice of the *moulvis* and *kutís*, began building this mosque and finished it in four years. The builder's name was Kámil Khán. It is currently reported that the dome was richly gilded, and the crescent pure gold. The gold and gilt have long disappeared, but much of the beautiful carving and tracery remains. Eight villages, Bhopan, Saral, Isipur, Bhostán, Chivili, Modpur, Bharveli, and Pingari were granted for its maintenance. After the overthrow of the Bijápur kingdom, the grant was renewed by Shivaji (1670). The mosque still bears the name of its founder Māsáhibah. It is no longer used for worship. The local Musalmáns are too poor to keep it in repair. Year by year it is crumbling into ruin. The minarets are tottering, and the loosened stones are falling from their places. In 1873 a small sum was granted by Government to carry out the most necessary repairs. Nairne in Ind. Ant. II. 280-281.

² As much of the inscription on this mosque as has been read runs: 'In the name of God, the Just, the Merciful. Verily mosques belong to God, so be not co-sharers with Him. The rival of this mosque in colour does not exist in the world. The best of well born Governors Pir Ahmad (built this mosque) in the year 1059 (A.D. 1649) of the Hijra of the Prophet, on whom be peace and blessing.'

³ Bom. As. Soc. Meeting, Sept. 1879.

⁴ Nairne's Konkan, 129.

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DÁPOLI.
Management.

In 1862, the head-quarters of the old Suvarndurg sub-division were moved from fort Gova at Harnai to Dápoli. Besides the offices of the mámlatdár, the sub-judge, and the chief sub-divisional police offices, there is, to the north of the camp a civil hospital, a native library, a Roman Catholic chapel, a post office, a vernacular school, and a large rest-house. Here also are the remains of the former military lines and the old and still habitable quarter guard. In a corner of the open plain, and divided from the market by the Harnai-Khed road, stands one of the chief features of the camp, the picturesque old English church with a square tower and belfry. On the south side of the camp is the office of the pension paymaster of the southern Konkan, and dotted here and there round the plain are the dwellings of the European residents. In 1878, the Society for the Propagation of the Gospel removed their Orphanage from Bombay to Dápoli, where, on a site near the church, school-rooms and buildings for the boys and girls and for the resident clergyman are being raised. The lately started municipality draws its income from a house-tax.

Graveyards.

There are two European graveyards, the first to the south of the camp containing only a few graves dating from 1818 to 1821, and a larger one to the north with the tombs and memorial stones of those buried since 1821. There is no grave of any special interest. In the centre of the plain, under a clump of mango trees, is the Jews' burial ground, with ten or twelve tombstones with inscriptions in English, Hebrew, and Maráthi.

DEVGAD.

Devgad, north latitude $16^{\circ} 23\frac{1}{2}'$ and east longitude $73^{\circ} 21'$, the head-quarters of the Devgad sub-division, lying on a flat rocky peninsula about twelve miles south of Vijaydurg and 180 miles from Bombay, had, in 1872, a population of 894 souls. Its safe and beautiful land-locked harbour is at all times perfectly smooth. The cliffs, steep on the north, fall on the harbour side in steps with a slope varying from twenty-five to forty degrees. The entrance is broad, but the passage into the harbour, only three cables wide, lies close to the fort point. Here, in eighteen feet water, ships may lie sheltered during the south-west monsoon.¹

Trade

Devgad, though a good port, is inconveniently placed, and has never had any but the most trifling local trade. For the five years ending 1877-78, the average yearly trade was valued at £24,611 8s. (Rs. 2,46,114) of which £8820 11s. (Rs. 88,207) were exports and £15,790 11s. (Rs. 1,57,907) imports. It has been joined by a good provincial cart road with the route over the Phonda pass. But the road has brought no traffic and is little used. During the famine year (1877) 555 tons of grain for the Kolhápúr state were consigned to this port for carriage through the Phonda pass.

¹ Taylor's Sailing Directory, 390. It is high water on full and change of the moon at eleven hours; the rise and fall is about nine feet at spring tides and five feet at neaps.

In 1875 the head-quarters of the sub-division were moved here from Khárepátan, and it has now a mámlatdár's office, a subordinate judge's court, a post office, a sea custom house, and a vernacular school. In 1538, Devgad, under the name Tamar, is mentioned as nineteen leagues from Goa and three south of Khárepátan. It was a beautiful round bay and good harbour with a clear entrance. Galleys could enter at low tide.¹ When taken in 1819, it was a fine harbour, but a place of little consequence.²

The fort on the south side, with an area of about 120 acres, said to have been built by the Angriás 175 years ago, and taken by Colonel Imlack in April 1818,³ protects the harbour, but perhaps because there was no place of importance up the creek, only slightly commands the entrance. There seem to have been two forts, on the north and south ends of the hill between the harbour and the sea, joined by three or four round towers.⁴ In 1862 the walls were in a ruined state and there was no garrison. Water was abundant but supplies scanty. There were forty-one old and unserviceable guns.⁵

Devrukh, since 1878 the head-quarters of the Sangameshvar sub-division, with, in 1876, 2660 people, stands on an open plain or table-land about twelve miles south of Sangameshvar, between the Kundi and Ámba passes, at the foot of the Sahyádrí range and below the fort of Mahipatgad. Besides a post office and a vernacular school, the town contains the mámlatdár's and chief constable's offices, and the court of the subordinate judge, which were moved to Devrukh in 1878 after the disastrous fire at Sangameshvar.⁶ Devrukh, though at present with no trade, is on the old track between Sakharpe at the foot of the Ámba pass and Sangameshvar. It is intended to make a cart road over this line as a subsidiary work to the Ámba pass scheme. The town is held in grant by Rája Sir Dinkar Ráv. It is healthy, well wooded, and picturesque.

Dha'ma'pur, a large village in the Málvan sub-division, on the Karli creek ten miles east of Málvan, on the road to Kudál and Sávantvádi, had, in 1872, a population of 2045 souls. It is chiefly interesting for a lake⁷ which waters a large area of rice and garden land both in Dhámápur and in the neighbouring village of Kálsa. The lake, one and a half miles long, and on an average a quarter of a mile broad, covers an area of about 120 acres, and on three sides is surrounded by well wooded hills. The narrow ravine between the steep hills on the south has been dammed by a solid earthen embankment faced with masonry, 450 feet long, and at its widest ninety-six feet broad. The lake having no sluice or other means

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DEVGAD.
History.

Fort.

DEVRUKH.

DHAMAPUR.

¹ Prim. Rot. da Costa da India, 23. It has been thought to be Toporon mentioned both by Ptolemy (150) and in the Periplus (247). McCrindle's Periplus, 129.

² Malvan Resident, 31st May 1819; Bombay Revenue Diaries 141 of 1819, 2310.

³ The particulars of the capture are: A detachment of the IVth Rifles under Col. Imlack moved on Devgad, where it arrived on the afternoon of the 7th April 1818. During the night the enemy kept a very heavy but fortunately ill directed cannonade, and early the next morning left the fort in sailing vessels. It was then occupied by the detachment. Service Record of H. M.'s IVth Rifles, 23.

⁴ Low's Indian Navy, I. 296.

⁵ Gov. List of Civil Forts, 1862.

⁶ Details are given below, p. 372.

For further description see Chap. I. p. 14.

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Places of Interest.

DHĀMĀPUR.

for regulating the water discharge, the channel has every year to be dammed by the villagers with earth and faggots. On the level top of the dam, on a paved terrace with a broad flight of stone steps running to the water's edge, stands a temple of Bhagavati and other minor buildings. The local story that the dam is 250 years old, is to some extent confirmed by the size and evident age of the trees growing on its top. The tradition is that in former years there was at the bottom of the deep stream a temple of Bhagavati. Pious Hindus, after praying to the goddess and casting flowers into the stream, had only to utter a wish for any ornament or jewel, and at the same time to lower an earthen vessel into the water, when it would be immediately returned with the wished-for gift. When the dam was constructed a temple of Bhagavati was accordingly built on it. A small yearly fair is held in the Hindu month of *Chaitra* (March-April). The hill slopes round the lake are now a Government forest. The village has a post office and a vernacular school.

DHOPESHVAR.

Dhopeshtar, a well known temple, in a village of the same name, with, in 1872, 2725 people, stands a mile or so west of the town of Rājāpur. The village revenues are alienated for the support of the shrine, and every year, attended by about 1000 people, a fair is held on *Maha Shivrātra* (March). A procession is formed, and the idol, covered with a gold mask, is carried round the temple in a palanquin.

FATEHGAD FORT.

Fatehgad Fort. See Harnai.

FORTS.

Forts. Ratnāgiri forts are either inland or on the coast. Coast forts are of two classes, island and headland forts. Of island forts the chief are the Harnai fort of Suvarndurg and the Sindhudurg fort at Mālvān. Of headland forts, most of them on the bank of some river, the chief are, beginning from the north, Bānkot, Anjanvel or Gopālgad, Govalkot, Jaygad, Ratnāgiri, Purangal, Sātavli, Rājāpur, Jaytāpur, Vijaydurg, Khārepātan, Devgad, Bhagvantgad, Rāmgad, Sidhgad, Nivti, Vengurla, and Redi. The sites of a few of these, such as Anjanvel or Gopālgad, Jaygad, and Rājāpur, are very little raised above sea level. Inland forts, all much the same in character, are built on some natural post of advantage, if in the low country on some steep hill commanding a river or pass, if in the main ranges on some projecting spur or rock, or above a great natural scarp. All are built on the same principle. The hill top or the end of the spur or point is girt by a wall, strengthened by many bastions. On any slope or place likely to invite approach, an outwork is built and joined with the main fort by a passage between a double wall. The entrance, for there is seldom more than one, is generally the strongest and most noticeable part. The outer gateway, if the ground permits, is thrown far forward and protected by a bastion on each side, and often by a tower above. Entering this, a narrow passage winding between two high walls leads to the inner gate, in the face of the main wall, along an approach commanded by bastions. This arrangement, in a time when guns could not compete with stone walls, rendered the gates almost unapproachable. Inside the main wall there was generally an inner fortress or citadel, and surrounding

this the buildings required for the troops, magazines, reservoirs, and wells. In many of the larger forts, houses for the commandant, or massive round towers were built upon the wall of the main works on the least accessible side. The larger forts had generally a town, *petha*, clustered about or near the base of the hill.

The age of most forts is hard to fix. Some of them, as Mandangad, may be as old as the Christian era. But of this the evidence is very slight.¹ Many are said to have been built by Bhoj Rája of Párnála in the end of the twelfth century.² But most are supposed to be the work of the Bijápur kings (1500-1660), raised in the sixteenth century, and in the seventeenth repaired and strengthened by Shiváji.³ Like those of the north Konkan, the Ratnágiri forts were neglected by the Peshwás.⁴ In 1818, except for the labour of bringing guns to bear on them, they were easily taken by the British. Nothing was done to destroy the fortifications. But except Bánkot, Harnai, Vijaydurg, and a few others which have from time to time been repaired, all are now, from weather and the growth of creepers and wall trees, more or less ruined. There are said to be 365 forts in Ratnágiri. Details of only forty-three of these have been obtained.⁵

Fort Victoria. See Bánkot.

Ganesh Pula, near Neruvádi in the Ratnágiri sub-division, is a holy spring oozing from the rock. In a temple near is a small image of Ganpati with a yearly endowment of £120 (Rs. 1200). It is often enriched by free-will offerings.⁶

Gopalgad Fort. See Anjanvel.

Gova Fort. See Harnai.

Goval, the Chiplun landing place, a village on Máp island, twenty-eight miles from the mouth of the Váshishti, and by cart road three miles from Chiplun, with, in 1872, 3439 people, has a custom office and a rest-house. Of its old fort, stone quays, and water scheme, details are given under "Chiplun".

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FORTS.

FORT VICTORIA.

GANESH PULA.

GOPALGAD FORT.

GOVA FORT.

GOVAL.

¹ See below, "Mandangad" (p. 352).

² Nairne's Konkan, 19.

³ Shiváji more than any of its rulers attached importance to hill forts. Every pass was commanded by forts, and in the closer defiles, every steep and overhanging rock was held as a station from which to roll great masses of stones, a most effectual annoyance to the labouring march of cavalry, elephants, and carriages. It is said that he left 350 of these posts in the Konkan alone. Orme's Hist. Frag. 93. One distinguishing mark of forts built or rebuilt by Shiváji is, inside the main gate, a small shrine with an image of the monkey god, Hanuman or Māruti. Mr. G. Vidal, C.S.

⁴ For twenty years not a day's labour or a rupee's wage had been spent on them. The defences were neglected and the water in many of them bad. Nairne's Konkan, 117.

⁵ These are: Ambolgad, Bahiravgad, Bahinavgad, Bharatgad, Bhavangad, Bhagvantage, Devgad, Fatehgad, Fort Victoria, Gopalgad, Gova, Govalkot, Jaygad, Jaytápur, Kámtékot, Kanakdurg, Khárepatan, Mahipatgad, Maimatgad, Mandangad, Nándos, Nivti, Palgad, Pandavgad, Purangad, Rajapur, Rajkot, Rámangad, Rasalgad, Ratnágiri, Redi, Satavli, Sidhgad, Sindhudurg, Sumárgad, Sarjekot, Suvarndurg, Uchitgad, Vengurla, Vetálgad, Vijaydurg, Vijaygad, and Yashvantage.

⁶ Oriental Christian Spectator (1834).

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Places of Interest.

GOVALKOT FORT.

Govalkot Fort,¹ in Chiplun, on a small hill rising from rich fields, surrounded on three sides by the Chiplun creek and with a filled up ditch on the fourth, covers an area of about two acres. It has no garrison. Water lasts till April and provisions can be had in a village two miles off. In 1862 the walls and bastions were much ruined. It had then twenty-two old and unserviceable guns.² The place has little natural or artificial strength. There are two doorways, one to the north the other to the east, and eight battlements. On the south wall is an image of Redjáji.

According to local report the fort was built about 1690 by the Habshi of Janjira. The Habshi may have repaired the fort. But the position of the Redjáji image seems to show that it was part of the original fort and that the builder or renewer was a Hindu king, probably Shivráji (1670). From the Habshi it was taken by Ángria (about 1744), from him by the Peshwa (1755), and from the Peshwa by the English (1818). Within the fort are traces of buildings and dwellings, and a dry pond forty-seven feet long, forty-four broad, and twenty-two deep.

GUHAGAR.

Guha'gar, a large village on the coast, six miles south of Anjanvel, had, in 1872, 3445 people, lodged in 576 houses. It was known to the Portuguese as the bay of Bráhmans, a name that it still might very well bear.³ In 1812 the Peshwa Báji Ráv, as a hot weather retreat and for certain religious rites, built a palace on the cliff to the south of the village. Most of the materials were (1823) used for Government buildings in Ratnágiri,⁴ but some of the palace ruins are still standing. The road through the village, a straggling street some three miles long, is throughout well paved. The houses are built close to the beach, and the whole length of the village is densely shaded with cocoa palms and other trees. The population is in great part Bráhman. An open roadstead, with no anchorage or tidal creek to shelter even the smallest craft, Guhágar has never been a place of trade. From 1829 to 1873 Guhágar was the head-quarters of the Guhágar sub-division. In that year it was reduced to a petty division subordinate to Chiplun. It has now a mahálkari's office, a police station, a post office, and several temples. A fair bullock track runs to Chiplun.

HARNAL.

Harnai, north latitude $17^{\circ} 47\frac{1}{2}'$ and east longitude $73^{\circ} 5'$, about two miles south of Ánjarla and fifteen north of Dábhól, with, in 1872, a population of 6193 souls, lies in a small rocky bay, a shelter for coasting craft in north-west winds.⁵ Under the Maráthás, Harnai was the head-quarters of a sub-division, and here, in 1818, a station for British troops was established. It does not seem ever to have been a place of consequence. Harnai is connected

¹ Tuláji Ángria called this fort Govindgad and the Anjanvel fort Gopálgad, Gopal and Govind being generally used for any couple of things very closely alike. Mr. A. T. Crawford's MS.

² De La Valle's (1624), Letters, III. 143. It may perhaps be Ptolemy's (150) Aramagara or Bramagara. Bertius, 198.

³ Waddington's Report in Nairne's Konkan, 121

⁵ Taylor's Sailing Directory, 387.

by a third class cart road with Dápoli and Khed, and during the fair season coasting steamers call regularly. The population is mixed, Muhammadan, Koli, and Bráhmaṇ. The ordinary trade is small, averaging for the five years ending 1877-78, £29,231 (Rs. 2,92,310), of which £14,118 2s. (Rs. 1,41,181) are exports and £15,112 18s. (Rs. 1,51,129) imports. During the famine year (1877), 150 tons of grain were landed at the port, and by Khed and the Ámbavli pass sent to Sátára. From September to June there is a brisk market for fish, thronged by buyers from many miles round. The only industry is, by workmen of the Sáli caste, the weaving of coarse cotton robes. To improve the present scanty supply, a scheme has been started for bringing water by a masonry aqueduct from Asud, three miles distant on the Dápoli road. The estimated cost is about £3000 (Rs. 30,000). There is a post office, a police post, a custom house, and a fish and vegetable market.

The chief objects of interest are, a little to the north, the well known island fortress of Suvarndurg or Janjira,¹ and the smaller forts of Kanakdurg, Fatehgd, and Gova. On the mainland opposite Suvarndurg, and separated by a narrow channel, are the forts of Kanakdurg and Fatehgd, of little value except as outworks to Suvarndurg. According to one account they were built by Shálu in 1710 to overawe Suvarndurg, but were soon after taken and held by Ángria.² According to another account they were built in 1700 by Khairát Khán, the Habshi of Janjira, soon after his unsuccessful attack on Suvarndurg, and remained till 1727 in the Habshi's hands.³ In 1755, on the English capture of Suvarndurg, these forts yielded without a struggle.

Kanakdurg, on rising ground, surrounded on three sides by the sea, has an area of not more than half an acre. In 1862 it was ruinous, and had neither a garrison nor water.⁴ Of the fort nothing is now (1879) left but two battlements, one at each end. Inside are nine small ponds, eight near each other, separated only by open cut-stone walls, and the ninth at a little distance to the west. They have water enough for a large garrison.

Fatehgd or Victory Fort is an utter ruin.

Gova Fort, on rising ground, surrounded by the sea on its north and west sides, has an area of about two acres. In 1862 it was in good order, and had a guard of nineteen constables and sixty-nine old unserviceable guns. Water was scanty, but food supplies were abundant. Surrendering to the British on the fall of Suvarndurg, it was (1757) restored to the Peshwa, and retaken by the British in 1817. Larger and much stronger than the other forts, it is still in

Chapter XIV.

Places of Interest.

HARNAL.

Forts.

Kanakdurg.

Fatehgd.

Gova Fort.

¹ This is not the famous Janjira on the Rajpuri creek in Habsán. Details of Suvarndurg are given below, p. 338.

² A. Hamilton, about the same time, speaking of it as Horney Coat, says it was fortified by Shiváji. New Account, I. 244.

³ The names of the Governors of the forts during this time were, Dharamráv Sávant, Hibráv Dalvi, Sidi Masúd Khán, Sidi Masúd, Sidi Said or Amalgar, Sidi Said or Vadle, and Sidi Yakub. Mr. A. T. Crawford's MS.

⁴ Gov. List of Civil Forts, 1862.

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Places of Interest.

HARNAI.
Gora Fort.

fair repair, and has a traveller's and a district officer's bungalow. Like Suvarndurg it has an image of Máruti, the monkey god, on a wall, and a tortoise before the threshold. The walls are about twenty feet high. The southern part of the fort is about fifty feet above sea level.

Besides these fortifications there are small remains on an isolated rock, an island except at low tide, that commands the bay of Harnai. There is an English graveyard, where some of the officers of the detachment stationed here in 1818 are buried.¹ The large tomb near the forts was raised in honour of one of the Ángriás. There is also a Roman Catholic chapel and cemetery. The three chief Hindu temples are those of Eknáth, Murlidhar, and Kamaleshvar. A small yearly fair is held in *Phálgun* (February-March).

Suvarndurg
Fort.

Suvarndurg, the Golden Fortress, with an area of eight acres, on a low irregular island, about a quarter of a mile from the shore, surrounded by a very high wall, is perhaps the most striking of the Ratnágiri coast forts. Great part of the fortifications are cut out of the solid rock and the rest are built of blocks of stone ten or twelve feet square. Relieved by bastions and broken by one rough postern gate just above high tide mark, the walls are so overgrown with trees and bushes, that, except at low tide, it is impossible to walk round them. Within the fort are several reservoirs and a small step well with water enough for a large garrison. On a stone at the threshold of the postern gate is an image of a tortoise, and opposite it on the wall towards the left, one of Máruti. There are two guard rooms to the right and left, and rooms also under the bastions. At a little distance is a stone building plastered with mortar, said to have been the magazine. Some very extensive foundations are probably the sites of old palaces. In 1862 the walls and bastions were in good repair, but the gateway was ruinous. There was no garrison, but the supplies of water and food were abundant. There were fifty-six old and unserviceable guns.²

Suvarndurg, probably built by the Bijápur kings in the sixteenth century, and in 1660 strengthened by Shiváji, was in 1698 a station of Kánhoji Ángria's fleet, and in 1713 was formally made over to him by Sháhu Rája. Under Kánhoji's successor Tuláji, Suvarndurg became one of the head centres of piracy. Such damage did its fleets cause, both to native and foreign shipping, that the Peshwa's government several times proposed that the English should join them in suppressing Ángria. Early in 1755 a joint attack on Suvarndurg, Báukot, and some other of Ángria's forts was arranged. But the Bombay Government was very cautious, telling their Commodore not to attack the forts, only to blockade them, and let the Maráthás besiege them from the land. Starting on the 22nd March, Commodore James, with the Protector of forty-four guns, a ketch of sixteen guns, and ten bomb vessels, was, after three days, joined off

¹ The principal are the tombs of Capt. Vansittart of the 44th Regiment N. I. and Lieut. Skirrow, R. E.

² Gov. List of Civil Forts, 1862

Chaul by the Marátha fleet of seven grabs and sixty gallivats carrying 10,000 troops. In the afternoon news came that Angria's fleet was in Suvarndurg bay. The Commodore proposed to hurry on and blockade the harbour during the night. The Maráthás agreed, but failing to move in time, in the early morning Angria's ships caught sight of them and fled down the coast. The Protector pursued, but his Marátha allies, though their vessels were better sailers, lagged behind. The wind was light and Angria's fleet throwing out lumber, setting all sails, and hanging up their clothes and turbans to catch the breeze, kept their lead, till, as evening drew on, the Commodore gave up the chase. Landing near Suvarndurg he found Rámji Pant and his army two miles off and up to their chins in trenches, bombarding the three land forts with one four-pound gun. Seeing the helplessness of his allies the Commodore, in spite of his cautious instructions, determined to bombard Suvarndurg.¹ On the 2nd April he opened fire from the sea side. Making little way with the solid rock of the sea wall he changed his station to the north-east. Here, anchoring within 100 yards, his musketry drove the enemy from their guns, and a fire breaking out and spreading to the powder magazine, the garrison fled to Fort Gova. Before Suvarndurg could be taken the governor with some of his best men came back and refused to surrender. Fearing that during the night help might come from Dáhol, the Commodore landed half his seamen, who, hacking down the sallyport with their axes, forced their way into the fort and the garrison surrendered.² On the 11th April, after his return from Bánkot, Commodore James according to agreement made over Suvarndurg to the Marátha government.³ In 1802, Bájráv Peshwa, flying from Yashvantráv Holkar, sought safety in Suvarndurg. But the fort could not be defended and Bájráv was forced to leave his family and retire to Bassein.⁴ Holkar following him took the island and the Peshwa's family.⁵ In 1804 Suvarndurg was, in the Peshwa's interests,⁶ captured by the English from a revolted Marátha officer. The fort was in bad repair and the garrison, about 800 Arabs and Musalmáns, surrendered without fighting.⁷ In November 1818, it was taken by Colonel Kennedy with little resistance.⁸

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Places of Interest.

HARNAL.
Suvarndurg
Fort.

¹ Suvarndurg had fifty guns mounted on the ramparts, and the three shore forts eighty among them. Milburn's *Oriental Commerce*, I. 295.

² Grant Duff, II. (85-86.) says the siege lasted four days without the loss of a single man.

³ Low's *Indian Navy*, I. 132.

⁴ Nairne's *Konkan*, 107.

⁵ Blue Book on Maratha War (1803), 350, 463.

⁶ MS. Records in Nairne's *Konkan*, 108.

⁷ MS. Records in Nairne's *Konkan*, 108.

⁸ Blue Book, 128; Nairne's *Konkan*, 114, 116. The details of the capture are: In the end of November a detachment of Artillery and of the Marine Battalion (XXIst Regiment N. I.), under the orders of Captain William Morison of the IXth Regiment, was employed in reducing the fort of Suvarndurg which surrendered on the 4th December 1818. The Governor in Council, in General Orders of the 20th December, was pleased to express his high sense of the conduct of the detachment upon the occasion. Though opposed by very superior numbers, the energy of this small force succeeded in surmounting every obstacle, escalading and taking in open day, with a party consisting only of fifty sepoys and thirty seamen led by Captain Campbell of the IXth Regiment and Lieut. Donnicette of the Marines, the

Chapter XIV.
Places of Interest.

The fort's area of seven and a half acres, plentifully supplied with water and overgrown with grass, weeds, and *bor* trees, has lately been made a Government forest reserve.

JAYGAD.

Jaygad, north latitude $17^{\circ} 17'$ and east longitude $73^{\circ} 15'$, a village near the fort of the same name, on the south shore of the entrance to the Shástri or Sangameshvar river, about fourteen miles south of Guhágár and $99\frac{1}{2}$ south of Bombay, had, in 1872, 2442 people and a small trade in salt and fish. The average yearly trade, for the five years ending 1877-78, was valued at £54,677 8s. (Rs. 5,46,774) of which £23,241 2s. (Rs. 2,32,411) represented exports chiefly firewood and molasses, and £31,436 6s. (Rs. 3,14,363) imports chiefly rice and salt. Jaygad seems never to have been a place of consequence,¹ and is now (1879) little more than a fishing village. The climate is healthy, and the water supply from some reservoirs close to the fort is excellent. It has a custom house and a post office.

Port.

From Jaygad point the river mouth stretches more than a mile north to Borya, forming a bay two miles deep and five broad. The chief entrance, with eighteen feet at low water, lies close under the Jaygad cliffs. Within the point is a deep harbour safe against all winds.²

Fort.

Jaygad,³ or Fort Victory, with an area of four acres, stands close to the shore on gently rising ground not more than 200 feet above the sea. Except in a few places, the walls and bastions are in good repair. The fortifications consist of a strong upper fortress on the brow of the hill, with a lower line of defences on the shore immediately beneath it, joined to the upper works by a connected line of bastions down the steep slope of the hill, the whole enclosing a considerable space now occupied by a few native huts. The upper part, added by Shiváji, has several finely constructed wells of good water and a few habitable dwellings. There is a sallyport in the lower walls near the sea, but the main gate is at the top of a very steep flight of steps on the east side. The walls are covered with creepers, which are slowly but surely causing them to fall into ruin. Supplies are limited to fish and poultry, the latter being difficult to obtain; water can be procured from two wells near the landing place.⁴ In 1862 there was a guard of four police constables, and there were fifty-five guns all unserviceable.⁵

fort of Kandah (Kanakdurg) notwithstanding the heavy fire of the enemy. This gallant and successful enterprise having completely intimidated the enemy, the two other forts, of Gova and Janjira, were abandoned during the night. Service Record of H.M.'s XX1st Regiment N. I. (Marine Battalion).

¹ In 1819 there was no town, only straggling villages. Lieut. Dominicette, 9th June 1819. Bombay Public Diaries, 432 of 1819, 1066.

² Taylor's Sailing Directory, 388. It is high water at full and change of the moon at 10 hours 37 minutes, springs rise 9 feet 8 inches, neaps 6 feet 6 inches.

³ Jaygad has been identified with Strabo's (B.C. 54 - A.D. 24) Sigerdis, 'the rest of the coast besides Saraostus or Surashtra' (Hamilton's Strabo, II. 253); with Pliny's (A.D. 77) Sigeris on the Konkan coast, 'one of the chief ports of western India' (Bostock's Pliny, II. 50); with Ptolemy's (150) Melhizeris an island of the pirate coast; and with the Melhzeigara of the Periplus (247). It seems better to refer these names to the island, *Janjira*, and town of Melh or Melundi now known as Malvan. See below, p. 347.

⁴ Hydrographic Notice No. 20.

⁵ Gov. List of Civil Forts, 1862

Two miles distant, on a hill on the opposite shore, about a quarter of an acre in area, and with no garrison and no water, is the smaller fort of Vijaygad, protected by a ditch on three sides. In 1862, the walls were very ruined and it had only one entire gun. Supplies could be got from the neighbouring villages.¹ Jaygad fort is said to have been built in the sixteenth century by the Bijápur kings.² Towards the close of the sixteenth century, Jaygad seems to have passed into the hands of a pirate Hindu chief, the Náik of Sangameshvar, who, with seven or eight villages and 600 troops, was so strong that the combined Portuguese and Bijápur forces, twice, in 1583 and 1585, made expeditions against him.³ Jaygad was (1713) one of the ten forts ceded by Baláji Vishvanáth to Ángria on his promising to renounce Sambhájí, release the Peshwa, restore all his conquests except Rájmañhi near the Bor pass, and maintain the cause of Sháhu.⁴ With other Ratnágiri forts Jaygad was, in June 1818, made over to the British without a struggle.⁵

Within the fort two buildings in good repair are still used by district officers. To the west of the fort, on the sea slope of the cliff, protected from the sea by extensive outworks, stands the temple of Karteshvar or Shiv. There is also a reservoir of very pure water.

Jayta'pur, where native boats discharge and load, a small town in the Rájápur sub-division, with, in 1872, 1801 people chiefly Musalmáns, is situated four miles from the entrance of the Rájápur river.⁶ It is the outlet for the sea traffic from Rájápur, and the place of call for coasting steamers, which stop three times a week for passengers going to and from Rájápur. The town has a sea custom house, a post office, and a vernacular school.

Mandelslo (1638) mentions it under the name Suitapur as one of the best coast harbours, the island sheltering it from all winds.⁷ Ogilby (1670) calls it Cetapur, one of the chief Konkan ports,⁸ and at the beginning of the eighteenth century, Hamilton (1700-1720) speaks of Rájápur harbour as one of the best in the world.⁹ It was burnt by the Sidi and Moghal fleet in December 1676.¹⁰

On the north bank of the river, on the opposite side of the estuary lies the old ruined fort of Yashvantgad.¹¹ Close to the edge of the cliff on the south point of Rájápur bay is the Jaytápur light-house. This, a small white masonry tower twenty-one feet high, shows during the fair months (10th September to 10th June), a fixed white light of the sixth order. It is ninety-nine feet above the sea, and in clear weather is seen from a distance of nine miles. During the cyclone of the 15th January 1871, a small steamer, the General

Chapter XIV. Places of Interest.

JAYGAD.
Fort.

JAYTAPUR.

History.

Objects.

¹ Gov. List of Civil Forts, 1862.

² Jervis' Konkan, 92. Major Jervis says *fifteenth*. But see above, p. 195.

³ DeCoutto, XII, 30; Faria in Briggs, III, 524. See Nairne's Konkan, 35.

⁴ Grant Duff, 193. ⁵ Nairne's Konkan, 116.

⁶ Taylor's Sailing Directory, 389. The details of the river entrance are given under "Rájápur." ⁷ Voyages, 221. ⁸ Atlas, V, 248.

⁹ New Account, I, 244. ¹⁰ Orme's Hist. Frag. 64. ¹¹ See p. 68.

Chapter XIV. Outram, was wrecked off Ambolgad bay a few miles north of the Places of Interest. Jaytápúr light.

KÁMTEKOT FORT.

Ka'mtekot Fort, in the village of Kámte in the Devgad sub-division, lowlying and with an area of two-thirds of an acre, had once a ditch now filled and under tillage. In 1862 the walls were ruinous. There was no garrison and rather a scanty supply of water. Near a temple of Bhagvati were four old useless guns.¹

KANAKDURG FORT.

Kanakdurg Fort. See Harnai.

KANKESHVAR.

Kankeshvar, a small village on the coast in the Devgad sub-division, with, in 1872, a population of 713 souls, is noteworthy on account of the temple from which it takes its name. The temple, with granite foundations and laterite superstructure and dome, is said to have been built by a Musalmán trader. An inscription on a stone let in over the entrance, states that it was repaired and enlarged by the Kollápúr chief in 1680. A yearly fair, held on the last day of *Mágh* (February - March), attracts about 10,000 people. Shops are opened, and during twenty days cloth and other miscellaneous goods to the value of from £1500 (Rs. 15,000) to £2500 (Rs. 25,000) are sold.

KELSHI.

Kelshi, at the mouth of the Kelshi river three miles south-east of Bánkot,² with, in 1872, a population of 3291 souls, had, during the five years ending 1877, a trade valued at £8987 (Rs. 89,870) of which £3570 (Rs. 35,700) were exports and £5417 (Rs. 54,170) imports. Betelnut is the principal export. The trade is in the hands of a few resident merchants chiefly Bráhmans.

History.

Kelshi does not seem ever to have been a place of consequence. Dom João de Castro (1538) mentions it as a town with a mosque and Moors.³ De La Valle (1624) anchored here, but for fear of the Malabárs, did not go on shore.⁴ Ogilby (1670) mentions it as a town and river.⁵ In 1819, it was a place of little trade with a few Vanjáris and a small export of grain.⁶ The village, of well built houses, is thickly peopled and densely shaded by cocoa palms. The climate is considered unhealthy, the water supply from garden wells being scanty and sullied by subsoil drainage. The river is for a few miles navigable for small boats, and the hills on the north bank are well covered with trees. There are two temples one to the goddess Durga, the other to the god Shri Rámji. A yearly fair held in *Chaitra* (April-May) is attended by about 25,000 people.

KHÁREPATAN.

Kha'repa'tan, a town in the Devgad sub-division about twenty-five miles up the Vijaydurg river, had, in 1872, 2900 people. Of late years, by the silting of the river for some miles below the town,

¹ Gov. List of Civil Forts, 1862.

² Taylor's Sailing Directory, 386.

³ Primeiro Roteiro da Costa da Índia, 152.

⁴ De La Valle, III. 136. The Malabár pirates who, from their practice of lying in wait behind it, have given its name to Malabár Point in Bombay.

⁵ Atlas, V. 244; Dom João de Castro was probably Ogilby's authority as they both call the place Quelecin. See Prim. Rot. da Costa da Índia, 39.

⁶ Collector to Gov. 15th July 1819; Bom. Rev. Diaries, 142 of 1819, 2573.

Khárepátan has lost much of its value as a port. The present town has little trade, and its site is hot and confined. Through the Musalmán quarter a very rough road leads to an open space, stretching for a considerable distance along the river bank, with Musalmán tombs in every direction. This was the old Musalmán town, and though there is not a house now standing nor anything except the tombs and the walls of three or four mosques, it is easy to believe that there was once a large town, for there is a fine level space lying above a long reach of the river, and the hills behind slope very gently upwards.¹ The bulk of the people are Musalmáns.

The trade of Khárepátan is chiefly in fish and salt. It has direct communication with the Deccan by the Phonda pass, and is on the main line of road from Ratnágiri to Vengurla. A market held every Monday is attended during the fair season by about 1000 persons, and during the rainy months by from 200 to 300.

From the beginning of British rule until 1868, the town was the head-quarters of a petty division under a mahálkari. In 1868 it became the head-quarters of the Devgad sub-division, and had a mámlatdár's office, a subordinate judge's court, and a post office. In 1875 Khárepátan was abandoned, and the mámlatdár's and subordinate judge's offices were moved to Devgad.

At the beginning of the sixteenth century (1514) Barbosa mentions Khárepátan, *Arapatni*, as a small place where Malabár vessels took on board cheap rice and vegetables.² In the course of the same century it is mentioned as a place of trade and a resort of pirates.³ In 1571 it was burnt by the Portuguese.⁴ In the seventeenth century Khárepátan is more than once mentioned as the best port on the Konkan coast. But these references belong to Vijaydurg rather than to Khárepátan.⁵ In 1713 it was made over to Kánhoji Ángria, held by him till his defeat by the Peshwa in 1756, and finally ceded to the British in 1818. In 1819 it was described as one of the most suitable places for trade in the district. The largest boat could work up to it, and it was only about fifteen miles from the Bávda pass. Still its trade was small. The exports were valued at £9070 (Rs. 90,700), and the imports, chiefly of salt, at £16,100 (Rs. 1,61,000).⁶

On a small hill overlooking the town, is a fort about an acre in area. The walls and bastions were taken down in 1850, and used to make the Vághotan landing place.⁶ The sites of twelve or thirteen mosques are shown, and the remains of one, the Jáma mosque, prove it to have been a building of large size. Outside of the present town is a very large brick reservoir, ruinous and nearly dry, with an inscription stating that it was built by a Bráhma

Chapter XIV. Places of Interest.

KHÁREPÁTAN.

Trade.

Management.

History.

Fort.

¹ Col. 286, 21st Nov. 1878.

² De Coutto, VIII. 569, IX. 109.

³ See below, p. 63.

⁴ Gov. Res. 13th May 1819, in Bom. Rev. Diaries 141 of 1819, 2310.

⁵ Gov. List of Civil Forts, 1862.

⁶ Stanley's Barbosa, 73, 74.

⁷ Briggs' Ferishta, IV. 540.

Chapter XIV.
Places of Interest.

KHAREPÁTAN.

Tombs.

in 1659. Near the middle of the present town is a half-buried stone believed to have been the boundary between the Hindu and the Musalmán quarters. Among many tombs on the hill side a few not otherwise distinguishable, lying east and west, are said to cover the graves of Jews. And in the middle of the present town there is a colony of Karnátak Jains and a Jain temple said to be the only one in south Konkan. In the temple is a small black marble idol that was found three or four years ago in the bed of the river.¹

KHED.

Khed, the head-quarters of the Khed sub-division, with, in 1872, 3817 people, stands at the head of the Jagbudi river. Surrounded by hills, the town is oppressively hot during March, April, and May. Its trade, in the hands of Vánis, is carried on during the fair season only. An indifferent cart road by Dápoli connects Khed with Harnai port twenty-six miles distant, and Sátára is reached by a bullock track over the Ámbola pass. The provincial cart road connecting it with Chiplun nineteen miles south, and with Poládpur twenty-three miles north, places Khed in indirect communication with the routes to the Deccan by the Kumbhárli and Mahábaleshvar passes. Boats of light draught work up on the tide from Dáhol and Anjanvel to Khed. Besides the mánilatdár's and chief constable's offices, there is a post office, a vernacular school, and on the banks of a pond, a large rest-house with separate accommodation for European travellers.

History.

No references to Khed have been traced. Before 1873, when it was made a separate sub-division, it was the head-quarters of a petty division under Dápoli or Suvarndurg.

*Rock
Temples.*

On the side of a low hill to the east of the town are three small rock temples. Of their origin nothing is locally known. At present they are used by a family of lepers. Among several temples, none of architectural beauty, is one dedicated to the goddess Khedjái. To this idol, every third year, in the second fortnight of *Chaitra* (April-May), a buffalo bull is sacrificed and a small fair held. Booths and shops are opened, and there is some little traffic in cloth and sweetmeats.

KOL.

Kol, in the Dápoli sub-division, across the Sávitri river south of Mahád, has in the river to the south-east of the hill behind the village two small groups of rock temples. The first to the north-east of the village consists of a few broken cells of no pretension as to size or style. The other group to the south-east has one cell rather larger than the others. All are apparently unfinished and are much damaged. In the second group are three short inscriptions.²

LAÑJE.

La'nje, in the Rájápur sub-division, on an old highway between Sátarli on the Muchkundi and Vishalgad fort, though now a place of no importance, is said to have once been a large Musalmán town. It had, in 1872, a population of 2532 souls, Hindus and Muhammadans.

¹ Nairne in Ind. Ant. II. 321. In Burgess' List it is stated that copper-plates were found here. Ind. Ant. II. 321.

² Burgess' Rock Temples, 53.

The village, standing on a level plain, is well supplied with water and considered healthy. It is joined by a made cart road with Rájápur and Ratnágiri nineteen and twenty-two miles distant. Except in sandals, *vahúnás*, which have a good local name, the village has no trade. It draws its supplies chiefly from Rájápur. From the time of the Peshwa up to the 1st August 1879, when Vengurla was made a sub-division, Lánje was the head-quarters of a petty division of Rájápur.

In the town is the grave of a Muhammadan saint named Syed Chánd Bukhári Ali Fakir, said to have lived four hundred years ago. Yearly at the *Mágh* (January-February) full moon a fair is held, when the tomb is, with ceremonies and prayers, covered with a cloth and sprinkled with powdered sandalwood and cement. Hindus as well as Muhammadans join in the ceremony, and the fair is largely attended by people from Lánje and the neighbouring villages. Shopkeepers come from Rájápur and open temporary booths at which for about a month coarse country and imported cloth and miscellaneous articles are sold. There is also a domed tomb near the town with no more definite history than that it marks the grave of a princess who died on a journey.¹

Ma'chal, a lofty hill in the Rájápur sub-division, a few miles south of the Ratnágiri-Kolhápur road through the Ámba pass, is by a narrow gorge separated from Vishálgad Fort and the main Sahyádrí range. Crowned with a level plateau three and a half miles long and one and a half broad, and freely supplied with water, it is well suited for a sanitarium. According to the local story, in a narrow-mouthed cave on the western side of the hill there lived before the present cycle the famous sage Muchkund.

Mahápral, in the north-east corner of the Dápoli sub-division on the Sávitri river, eighteen miles from Bánkot and ten miles from Mahád in Kolába, was formerly an important Musalmán town, and is still chiefly a Musalmán settlement. It has a well attended weekly market for the sale of salt fish and vegetables. Vessels of sixteen feet draught can at all states of the tide run up the Sávitri to Mahápral. Between Mahápral and Mahád the navigation is difficult, as the river narrows and shoals with many rocky ledges and reefs.² A cart road has lately been made from Mahápral to near Poládpur the meeting place of the two fine roads through the Varanda and Fitzgerald passes. In connection with this new route a travellers' bungalow is being built at Mahápral.

Mahipatgad Fort, about twelve miles from Khed, facing the Hátlot pass and Makrángad, the Mahábaleshvar 'Saddleback,' stands at the head of a high spur, that running parallel to the Sahyádris is crowned by the three forts of Mahipatgad, Sumárgad, and Rasálgad. Reached by a very narrow difficult pass six miles long,³ Mahipatgad

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Places of Interest.

LÁNJE.

Tomba.

MÁCHÁL.

MAHÁPRAL.

MAHIPATGAD
FORT¹ Nairne in Ind. Ant. II. 317.² Collector's 4430, dated 12th Decr. 1877.³ The most direct practicable route from the northward is by the main road as far as the Government bungalow at Poládpur, whence to the left a path leads over broken ground, and after sighting the fort, winds among and over steep hills

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Places of Interest.

MAHIPATGAD
FORT.

is a table-land 120 acres in area, with no surrounding wall, but with well-built battlements and gateways in six places where the approach is easy. The defences are in bad repair, the wood work is gone, and in many places the stone work is in ruins. On all sides the table-land is surrounded by the village of Beldárvádi.¹ There are six gates, to the north the Kotvál gate formed by two battlements one on each side and joined with parts of the ramparts; to the north-east the Red gate, *Lál Devdi*; to the east the Pusáti gate formerly entered by a ladder; to the south-east the Yashvant gate and a thirty feet high battlement; to the south the Khed gate with traces of the path by which the garrison used to receive its supplies; and to the west the Shiyganga gate called after a *ling* at the source of a rivulet. At the entrance of the south or Khed gate, is the foundation of a temple of Māruti and Ganpati, its walls half standing half fallen. Here according to one account there were 360, and according to another 700 stables.² Further on is a stone house forty-five feet long by fifty-four broad, and a temple of Pareshtar a very strong building about twenty feet long by thirty-eight broad. It enjoys a yearly grant of £1 10s. (Rs. 15). In the temple enclosure are two ponds, with, on their banks, some engraved stones. The local story that the fort was begun and left half finished by Shiváji is supported by the heaps of mortar piled in several parts of the enclosure. The rough and uneven ground within the fort is overgrown with thorn bushes and other brushwood.

MAIMATGAD.

Maimatgad, perched on the top of a very high and steep spur of the Sahyádrí range, in the village of Nigudvádi, about six miles east of the village of Devrukh and $2\frac{1}{2}$ miles south of the Kundi pass, covers an area of about sixty acres. It has no garrison and no water. Provisions can be got from a village close by. In 1862, it was very ruinous and had four unserviceable guns.³

MALVAN, OR
SINDHUDURG.

Malvan,⁴ north latitude $16^{\circ} 4'$ and east longitude $73^{\circ} 31'$, a busy port, the chief town of the Málvan sub-division, had, in 1872, a population of about 14,000 souls. In a bay almost entirely blocked by rocky reefs, there were formerly three small islands, two of them about a quarter of a mile from the shore, and the third separated from the mainland by a narrow channel. On the larger of the two outer islands stands the famous fort of Sindhudurg, and on the smaller the ruined fort of Padmagad, now, at low tide, connected with the

Pursuing this pathway southwards, it is necessary to pass, at a distance of one and a half miles, along the whole west side of the fort. Reaching the valley, the ascent is gained over projecting spurs on the west, and leading over the south continuation of the range, the path winds over spurs on the eastern side of it, and reaches two hamlets, whence a steep pathway leads to the top. It is about four miles from the beginning of the ascent on the west to the interior of the fort. Report on Mahipatgad, 1854.

¹ Beldárvádi, bricklayers' suburb, is a strip of rugged land said to have been assigned to certain bricklayers brought by Shiváji to build the fort.

² Foundations of this sort are found all over the fort.

³ Gov. List of Civil Forts, 1862.

⁴ The name Malvan is said to come from the great salt marshes, *maha lavan*, to the east of the town. Mr. G. Vidal, C.S.

mainland by a neck of sand. On what once was the inner island and is now part of the mainland, lies, almost hid in palms, the old town of Málvan.¹ The coast is very rocky and foul. Abreast the fort a large ship should not anchor in less than eight fathoms. With a south wind the landing is best in the little bay to the north of Málvan point, and with a north-west wind in the Málvan harbour. On a sunken rock now marked with a buoy, a quarter of a mile from the north end of Sindhudurg island, the small steamer Johnston Castle was totally wrecked in 1865.² The course is marked by buoys, and by night is shown by a red light fixed to a boat in the harbour and a green light on shore, which must be kept in one line by ships entering or leaving the port.

Of the total 1872 population of 13,955 souls, 13,285 were Hindus, 442 native Christians, and 228 Muhammadans. Of the Hindus there were 1125 Bráhmans and Shenvis, 371 Vánis, 2056 Maráthás, 1092 Gávdas, 231 Kumbhárs, 253 Sonárs, 166 Sutárs, 2471 Gábits, 4331 Bhandáris, 354 Telis, 45 Bhávins or temple devotees, and 795 'Others'. Of the Muhammadans 183 were classed as Shaikhs, and 45 as Patháns.

Till the new road from Belgaum to Vengurla by the Párpoli pass was opened, Málvan was a place of considerable trade. Since then Vengurla has become the chief outlet for the produce of Belgaum and the neighbouring districts. A new road has lately been opened between Málvan and the Phonda pass, and a branch road made in 1877 as a famine relief work, joins it with the Párpoli pass at a point twelve miles east of Vengurla. As yet trade has shown no signs of recovering. Formerly the chief imports from the Deccan were food grains and pulses, cotton and Sháhápur cloth, with, in smaller quantities, molasses, tobacco, turmeric, chillies, oil nuts, and myrabolans. To a small extent these goods, excepting cotton, are still received. The chief imports by sea are rice, piece goods, and fresh and dry dates. Formerly Málvan was a place of call for Arab vessels who brought dates and umbrellas, and in return carried cotton, cocoanuts, and food grains to Bombay. The only exports by land are salt, cocoanuts, and coconut oil.³ By sea, molasses, salt, tobacco, cocoanuts, betelnuts, coir, and plaited palm leaves still go in small quantities to Bombay and other ports. The average yearly trade during the five years ending 1877-78, was valued at £67,695 (Rs. 6,76,950) of which £29,258 2s. (Rs. 2,92,581) were exports and £38,436 18s. (Rs. 3,84,369) imports. The leading local merchants are Bhátíás and Shenvis, Ká-árs who trade in cloth, and native Christians who deal in Sháhápur cloth and imported piece goods. The petty retail grocers and shopkeepers are

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Places of Interest.

MÁLVAN or
SINDHUDURG.

Population.

Trade.

¹ This inner island was called Medha, but the channel separating it from the mainland has been long dried up. This island stretched from a point about a quarter of a mile to the north of the old Residency to the site of the custom house on the south, and in it stood the old fort of Rajkot. The modern town of Malvan has spread far beyond the limits of the former island.

² Taylor's Sailing Directory, 390.

³ During the year 1877, 1200 tons of grain worth about £10,400 (Rs. 1,04,000) were forwarded from Bombay to the Deccan districts by Malvan and the Phonda pass.

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MÁLVAN.
Trade.

Vávis. Shenvi merchants deal chiefly in cloth, and Bhátíás in food grains and pulses, molasses, gálnuts, flax, chillies, tobacco, and cocoanuts. The main street, *Somvár Peth*, running parallel with the beach for about a mile, and containing all the principal shops, is clean and well kept. The houses are substantial tiled buildings, mostly with two stories. In the fair season a canopy of plaited palm leaves is raised from end to end to shade the street from the sun. Every morning during the fair season, in one of the side streets near the landing place, a well attended fish market is held.

Manufactures.

Until quite lately (1880) salt was, for local use and for export, made at the pans to the east of the town. The pans, of which twenty-nine were the property of private individuals and two of Government, produced a yearly average of about 470 tons (26,350 *mans*). Good red pottery is also made from a rich clay found to the east of the town.

Health.

The water supply derived from wells is ample and generally good. There is no dispensary, but a private shop has lately been opened for the sale of common European medicines. Beyond occasional outbreaks of fever, and a prevalence of bilious complaints, the town is reputed healthy.¹ The rainfall, averaging 73·52 inches, is lighter than that recorded from any other station in the district. Very strong northerly breezes prevail throughout the fair season, especially in March and April. The site of the old Residency, now the mámlatdár's office, is airy and open, and at all times cool and pleasant. The native town, nestled in dense groves and orchards of cocoanut, Alexandrian laurel² and cashew tree³ is hot, close and relaxing.

There is no municipality. The project has always been received with disfavour by the people and has not been pressed. The town, the head-quarter station of the revenue and police officers of the sub-division, has a subordinate judge's court, a post office, a sea custom house, and three vernacular schools two for boys and one for girls.

History.

Though its chief interest is the fort of Sindhudurg, Málván has for long been a place of considerable trade.⁴ In the sixteenth century it is mentioned as a centre of traffic, with a high road to the Sahyádrí hills.⁵ About the middle of the seventeenth century, when

¹ The natives say it agrees well with women, but badly with men, who lose flesh and vigour. This belief is to a great extent borne out by the look of the men and women.

² *Calophyllum inophyllum*.

³ *Anacardium occidentale*.

⁴ The similarity of the name Melizigeris, the island of Meli, and the fact that the chief export was pepper (Jassen Ind. Alt. I. 327) would seem to make it probable that Ptolemy's (150) island of Melizigeris, and the Periplus' mart of Melizeigata, and perhaps Pliny's (77) Zigerus, and Strabo's Sigerdis, were the island-town of Milandí or Málván. Later on Ibn Khurdadba (960) mentions Mali, an island five days south of Sanjan in the north of Thána (Elliot, I. 15), and Al Biruni (1030) has Mála south of Samur, that is Chaul in Kolaba (Elliot, I. 66). The Arab travellers may refer to Málván or Milandí, but more likely to the Malabár coast. Compare El Idrisi (1160) in Elliot, I. 85.

Bom. Gov. Sel. New Series, X. 156.

Shiváji fortified Sindhudurg, the creek about a mile and a half north of Málvan was navigable some miles up to Máland or Milandi then a place of considerable trade.¹ In 1750, under the name Molundi, it is mentioned as a fortified town belonging to Bhonsle, from whom, in 1746 and the two following years, it was taken by the Portuguese Viceroy, Pierre Michael Almeyda, who chased the pirates inland.² In 1765, the English stipulated that they should be allowed to have a factory at Málvan.³ After its capture by the English in 1766, Málvan, on payment of £38,289 12s. (Rs. 3,82,896) for loss and expenses, was restored to Kolhápúr.⁴ In 1792, the English again arranged to have a factory at Málvan.⁵ Since its cession by the Kolhápúr chief (1812) Málvan has remained under the British. At first it had a Resident and a civil and military establishment.⁶ In 1819, it was the centre of a trade valued at £28,579 (Rs. 2,85,790), of which £23,296 (Rs. 2,32,960) were imports and £5283 (Rs. 52,830) exports.⁷ In 1834 it is said to have had a population of 10,000 souls.⁸

The chief object of interest is Shiváji's fortress and coast capital, Sindhudurg, or the Ocean Fort. On a low island about a mile from the shore, though less striking than Suvarndurg, it is very extensive,⁹ little less than two miles round the ramparts. The walls are low, ranging from twenty-nine to thirty feet.¹⁰ They are on an average twelve feet thick, and have about thirty-two towers from forty to 130 yards apart. The towers are generally outstanding semicircles with fine embrasures for cannon, with in most a flat seat on the parapet, and stones projecting inwards drilled with flag staff holes. Here and there narrow staircases lead from the inside to the top of the walls. The entrance is at the north-east corner.¹¹ The area of the fort is forty-eight acres. Once full of buildings it is now a mere shell with nothing inside but a few small

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MÁLVAN.
History.

Sindhudurg.

¹ Nairne's MS. Dom João de Castro (1538) mentions that at low tide galleys could enter the river of Malundi. Prim. Rot. da Costa da India, 22.

² Tiefenthaler, Res. Hist. et Geog. I. 412.

³ Grant Duff, 509.

⁴ Graham's Kolhápúr, 497.

⁵ Grant Duff, 509.

⁶ Mr. Hale, 31st May 1819 in Bom. Rev. Diaries 141 of 1819, 2299.

⁷ Mr. Hale. These figures include small returns from Vengurla. The chief details are, of imports, cocoanut kernels £838, grain £1645, piece goods £2269, rice £12,855; of exports, coriander seed £502, clarified butter £554, hemp £1749, and piece goods £793. Mr. Hale, 31st May 1819 in Bom. Rev. Diaries 141 of 1819, 2319.

⁸ Oriental Christian Spectator, V. 114 (1834).

⁹ The figure of the fort is highly irregular with many projecting points and deep indentations. This arrangement has the advantage that not a single point outside of the rampart is not commanded from some point inside. South Konkan Forts, 1828.

¹⁰ On the sea side so low are the walls that at one place they seem almost below high water level, and inside of the fort are masses of wave-worn rock and stretches of sand. Nairne's MS.

¹¹ In 1823, the north and east faces were in very fair repair. A few fig trees had here and there made their appearance, but they were of no great size. The state of the west and south faces was deplorable. In no part of either of them was the parapet entire, in most places it had been washed away by the beating of the monsoons so as to leave not above two feet remaining, and in many parts it was destroyed clear away from the level of the ground and the whole of the terreplein or cannon platform was also washed away leaving great blocks of rough stone. A large stretch of the west and smaller parts of the south wall were undermined. It was doubtful if the west wall would stand many years more. In spite of repairs the buildings of the fort were, except the

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Places of Interest.

MÁLVAN
Sindhudurg.

temples.¹ To the Maráthás Sindhudurg is Shiváji's cenotaph² and in its chief shrine Shiváji's image is worshipped. The image is of stone, and the head is covered with a silver, or, on high days, with a gold mask. In the stone of the walls prints of Shiváji's hands and feet are held in reverence and protected by small domes.³ Besides the temple buildings the fort contains the huts of a few Gábits who have rented from Government the numerous cocoa palms that grow within the walls. Inside the fort, near the temple stands a solitary *Adausonia digitata*, *gorakh chinuh*, tree. The temple or shrine is supported by a yearly cash allowance of £152 4s. (Rs. 1522) assigned, in 1812, by the Kolhápúr chief through his minister Ratnákar Appa.⁴

About the middle of the seventeenth century (1665), failing in his efforts to take Janjira from the Sidi, Shiváji chose Málvan with its rocky islands and reef-blocked harbour as his coast head-quarters.⁵ Besides the main fortress on the larger of the outer islands, at which he is said to have worked with his own hands, he fortified the smaller island Padmagad, and on the mainland opposite the town and at the mouth of the creek about a mile and a half north, built the forts of Rájkot and Sarjekot.⁶ At the time (1713) of the division of Shiváji's dominions between the Kolhápúr and Sátára families, Málvan fell to the Kolhápúr chiefs, and under them became the head-quarters of the most active and destructive of the coast pirates.⁷

magazine and gateway, in a wretched state almost falling down. (Southern Konkan Forts, 1828). Considerable repairs must have been carried out, as in 1862 the walls and bastions were, with few exceptions, in fair order. There was no garrison, water was abundant and supplies easily obtained. In the fort were nineteen old guns. Gov. List of Civil Forts, 1862.

¹ In the 1862 list the area is given at thirty-one acres and it was said to contain thirteen houses, three temples, and one rest-house. Gov. List of Civil Forts.

² Grant Duff in Nairne's MS.

³ But for their exceeding smallness these imprints are very accurate representations of a hand and foot. Mr. R. B. Worthington, C.S.

⁴ Nairne's MS. Monday is the chief day for Shiváji's worship and the Kolhápúr chief sends turbans and other presents. The shrine is seldom visited by pilgrims and is not honoured by a fair. Mr. G. Vidal, C.S.

⁵ The difficulty of the harbour entrance, and the care taken in fortifying the land approach raise the belief that Shiváji meant Málvan as a place of refuge should he be brought to extremities. Nairne's MS.

⁶ Grant Duff, I. 188 and Nairne's MS. ⁷ Of the Malvan pirates Milburn (Oriental Commerce, I. 296) gives the following details: In the seventeenth and early years of the eighteenth centuries Malvan was the head-quarters of pirates known as Malvans, a very cruel race, according to Grant Duff, the most active and desperate of all the coast corsairs. None but the Rája fitted out vessels which were of three kinds, *galibats*, *shebars*, and *grabbs*. The *galibat* had generally two masts, was decked fore and aft, had square top sails and topgallant sails and was rigged mostly in European fashion. The *shebar* had also two masts the aftermast and bowsprit very short, no top masts, very little rigging and was not decked. Its largest sail was stretched on a yard of very great length running to a point many feet higher than the mast. They sailed well and were fine vessels in fair weather and smooth water. Many were more than 150 tons burden. The *grab* had instead of bows, a projecting prow, either two or three masts, and was decked and rigged in European fashion. Vessels of all kinds carried eight or ten small guns and about 100 men. Their favourite rendezvous was at Pigeon Island. They generally went on fifteen-day cruises, the common seamen at starting getting 4s. (Rs. 2) and the captains 16s. (Rs. 8). On their return they got the property of the chief, but unless very well suited for service they were generally released. They sailed with no written commission and with instructions to take any vessel they could master except such as had English colours and passes. Sometimes

About 1710 Hamilton¹ describes the chief as an independent freebooter who kept three or four *grabs* to rob all whom he could master. In October 1715 his boats attacked two vessels, in one of which was Mr. Strutt, Deputy Governor of Bombay, but seven shots scared them away.² In 1730 the pirates of Málvan seized on an English wreck. This caused much dispute, but at last a treaty was concluded with Shankar Pant the governor and commander-in-chief of Málvan.³ In 1765 an expedition, under the joint command of Major Gordon and Captain John Watson of the Bombay Marine, was sent against Sindhudurg. They speedily reduced the fort, and intending to keep it gave it the name of Fort Augustus. But as it was unprofitable and very hard to dismantle, the fort was given back to the Kolhápúr chief, on his promising not to molest trade, to give security for his future good conduct, to pay the Bombay Government a sum of £38,289 (Rs. 3,82,890), and to let the English establish a factory at Málvan.⁴ In the beginning of the present century, the Málvan pirates were as troublesome as ever. Towards the close of 1812, Colonel Lionel Smith, with a slight military force and a squadron of small craft helped by the fifteen-gun cruiser Prince of Wales, went to Málvan and completely rooted out the nest of pirates.⁵

Pándavgad, the other island fort, with an area of one acre, lies about half a mile from the mainland and within a mile of Málvan. This island, where Shiváji used to build ships, half reef half sand-bank, with ruins and cocoanut palms, is the prettiest part of Málvan.⁶ In 1862 the walls were very ruinous, there was no garrison, and the supply of water was defective.⁷

Of the two mainland forts Rájkot and Sarjekot, Rájkot Fort stands within the boundaries of the town of Málvan, on rising ground surrounded on three sides by the sea. In 1828, Rájkot was a mere enclosure of dry stone, open towards the bay and flanked at three corners by towers of cement masonry, then entirely ruinous. Inside it were several buildings in tolerable repair, and the walls appeared never to have been intended except as a slight protection to them.⁸ In 1862 the fort was in several places much broken down, there was no garrison and only one gun.⁹ Near it are some buildings of interest, the barracks made in 1812, and the máinlatdár's office, the old Residency, and probably the factory established about 1792.¹⁰

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MÁLVAN.
Sindhudurg.

Pándavgad.

Rájkot.

they seized boats under English protection, evading the open assault by sending on some boats, who, examining the pass, contrived to steal or lose it and make off. Soon after, the rest of the pirates came up and seized the trader. In many cases restitution was demanded by the British Government and made without demur.

¹ New Account, I. 247.

² Low's Indian Navy, I. 116.

³ Low's Indian Navy, I. 278.

⁴ Nairne's Konkan, 72. It is said to have been once held by Mhárs. Gov. List of Civil Forts, 1862.

⁵ Southern Konkan Forts, 1828.

⁶ The 1765 treaty had a provision for a factory. But as the stipulation was repeated in the 1792 agreement, the factory had probably not till then been started. Grant Duff, 509 in Nairne's Konkan, 105.

⁷ Low's Indian Navy, I. 92.

⁸ Grant Duff, III. 99-100.

⁹ Gov. List of Civil Forts, 1862.

¹⁰ Gov. List of Civil Forts, 1862.

Chapter XIV.**Places of Interest.****MÁLVAN.***Sarjekot Fort.*

Sarjekot Fort, about $1\frac{1}{2}$ miles north of Rájkot in the village of Rundi on the coast, is washed on the north by the sea and protected on the three other sides by a ditch. In 1862 the walls were in bad repair and there was no garrison and no water.¹ Close to the town are a number of Christian graves, but only two with any writing on them. Of these one was raised by the officers of the station to Colonel Robert Webb commanding at Málvan, who died in 1815. The other is the tomb of a serjeant.

There is a small Roman Catholic chapel on the road leading to Áchra. In the town are Hindu temples dedicated to Rámeshvar, Náráyan, Sáteri, Dattátray, and Murlidhar.

**MANDANGAD
FORT.**

Mandangad Fort, on the high hill of the same name in Dápoli, about twelve miles inland from Bánkot, has two forts and a triple stockade with an area of about eight acres.² Of the three fortifications, Mandangad proper, with two reservoirs, lies to the south, Párkot is in the middle, and Jámba, with a dry reservoir, on the north. In 1862 the walls were in several places much ruined.³ The likeness of the name suggests that Mandangad may be Mandagora, a town of the Konkan coast, as mentioned by Ptolemy (150) and in the Periplus (247). At the same time it seems more probable that Mandagora was on the coast at the mouth of the Bánkot creek, on the site of the present villages of Bágmándla and Kolmandla.⁴ Though they are probably much older, local tradition ascribes Mandangad to Shiváji, Párkot to the Habshi, and Jámba to Ángria. They were taken in 1818 by Col. Kennedy with the loss of one seaman and nine or ten sepoys wounded.⁵

The head-quarters of the Mandangad petty division have, since 1859, been in Durgávádí, a small village of 577 souls and no trade, at the foot of the hill. It has a mahálkari's and chief constable's office, a post office, and a vernacular school.⁶

MASURA.

Masura, about half way between Málvan and Máland or Milandi on the Kálávli creek, with, in 1872, 7308 people, has been identified with the famous Muziris of Ptolemy (150) and the Periplus (247), then one of the chief places of trade in western India.⁷ It is now pretty generally agreed that Muziris was further south on the Kánara or Malabár coast.⁸ A place of very

¹ Gov. List of Civil Forts, 1862.² Gov. List of Civil Forts, 1862.³ Gov. List of Civil Forts, 1862.⁴ Ptolemy's Asia, X. ; McCrindle's Periplus, 129. See above, p. 192.⁵ M.S. Records in Nairne's Konkan, 114. The reduction of the forts of Mandangad and Jámba was announced in General Orders of the 20th February 1818. In Colonel Kennedy's detailed report, he specially thanked Captain Farquharson, Lieuts. Dominique and Capon, and the seamen and native officers for the intrepid and gallant manner in which they assaulted the triple stockades in front of the communication gateway and carried the forts by escalade. Service Record of H. M.'s XXIst Regiment N. L.⁶ Mr. G. Vidal, C. S.⁷ Ind. Ant. II. 293.⁸ Muziris has by Forbes, 1783 (Or. Mem. IV. 109), and by Rennel, 1788 (Map of Hindustán XXXVII.), been identified with Mirján near Kunta in north Kánara. Dr. Caldwell's suggestion (Dravidian Grammar, Introd. 97), that Muziris is Mu-yir-katto, the modern Kranganor in Cochin, is, though this is much further south than Ptolemy puts it, now generally accepted (Balfour's Cyclopædia, Muziris ; McCrindle's Periplus, 131). Yule (Cathay, II. 374) marks it doubtful.

little trade, producing chillies and sugarcane, Masura is the headquarters of a petty division of eleven villages. It was in the possession of the Sávants of Vádi up to about 1809 when a half share fell to Kolhápúr. In 1811, the Kolhápúr share came into the hands of the British, and in the same year the Vádi share was made over to Kolhápúr. After remaining under Kolhápúr till 1845, this half also became British property.¹ In a hamlet close to Masura is a temple of Shri Dev Bharádi, in honour of whom every December a fair is held, attended by from 2000 to 3000 persons.

Mirya, north latitude $17^{\circ} 1' 34''$ and east longitude $73^{\circ} 18' 6''$, a high headland of bare laterite rock, lighter in colour than the surrounding land and from the north and south looking like an island, lies in the Ratnágiri sub-division about two and a half miles north of Ratnágiri Fort. Its very steep sea face, covered with large laterite boulders, ends near the water edge in cliffs of varying height. Mirya peak at its highest part, on which there is an old flag-staff, is 475 feet above the sea.

Between Miyet, the south-west point of the Mirya hill and the Ratnágiri headland, lies Mirya Bay one and a half miles long and one mile deep, with depths of from four to five fathoms to within a quarter of a mile of the beach. The shore is a narrow sandy strip in no part more than six hundred yards across. It is covered with cocoa palms and fronted by a ridge of sand hills rising from twenty to thirty feet above high water. It connects the headland of Mirya with the mainland, and behind it is an extensive flat of mud and sand, in many places thickly overgrown with mangrove bushes and covered at spring tides. Through this the Shirgaon creek winds to the native town of Ratnágiri. The entrance to this creek is on the north side of the Mirya headland where it joins the Kálbádevi river, a large inlet, with, at the north side of its mouth, the village and temples of Kálbádevi. Large native craft come up the Shirgaon creek at high water, and lie off a landing place near the native town of Ratnágiri. Part of the new road from Ratnágiri to Mirya, which runs parallel to this creek, is also used as a wharf for native craft. In the north of Mirya Bay is a sunken rock called the Muddle Shoal, with, at low water, a depth of only five feet. On all sides shoal water stretches for one and a half cables, but at two cables there is a depth of six fathoms.

On the north side of Mirya headland is Kálbádevi Bay in whose south-east corner there is, in five fathoms mud, sheltered anchorage from south-west winds. Here, during the stormy season of 1857, troops were safely landed in smooth water.² In connection with the Ámba pass project a good cart road has lately been made from Ratnágiri to this landing place.

Na'ndos Fort, in Nándos village in the Málvan sub-division is not more than a quarter of an acre in area. In 1862 it was

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MASURA.

MIRYA.

NANDOS FORT.

¹ From local information.² Hydrographic Notice No. 17.

Chapter XIV. surrounded by a ditch and was in fair repair. There was no
Places of Interest. garrison. Water and supplies were abundant.¹

NEVRA.

Nevra, in the Ratnágiri sub-division, at the mouth of the Nevra creek, about ten miles north of Ratnágiri, had, in 1872, 3336 people. A little north is Ganpati Pol, where, about 150 years ago, one Govind Pant Bundela built and dedicated a temple to Ganpati. The temple and adjoining buildings stand on a site cut and levelled from the cliff, close to the sea beach. Besides the principal shrine there is a large rest-house and fresh water reservoirs. A yearly allowance of £120 (Rs. 1200) is made to the temple by the chief of Sângli. Fairs are held twice a year, with an attendance of from two to three thousand persons.

NIVTI FORT

Nivti Fort, in the village of Kochra, six and a half miles south of Málvan and eight north of Vengurla, stands at the mouth of a small creek in rather a striking bay. Rennell (1788) suggested that Nivti was Ptolemy's (150) Nitra and Pliny's (77) Nitrias, 'where the pirates cruized for the Roman ships'. But this is very doubtful, and as far as has been traced, Nivti has never been of importance as a centre of trade.² The average yearly value of trade, for the five years ending 1877-78, was £3167 8s. (Rs. 31,674) of which £2604 16s. (Rs. 26,048) represented exports and £562 12s. (Rs. 5626) imports.³

Nivti fort, on a very picturesque and well wooded headland about 150 feet high, is a complete ruin.⁴ In 1786 it was taken by the Kolhápúr troops and soon after restored to Sávantvádi.⁵ In the early years of the present century (1803 and 1810), after being taken and retaken by these rival chiefs, it in the end remained with the Sávants. In 1818, when British power was established, the southern villages continued to suffer from the raids of the Sávantvádi garrisons of Nivti and Redi. Under Sir W. G. Keir a force⁶ was sent into the Konkan, and on the 4th February 1819 Nivti was invested and given up without resistance.⁷

PÁLGAD FORT.

Pa'lgad Fort, about one and a half acres in area, stands on the crest of a high hill on the north-west boundary of Khed. In 1862, it was in ruin, with nine old useless guns. It is said to have been built by Shivráji and was taken in 1818 by Colonel Kennedy.⁸ The

¹ Gov. List of Civil Forts, 1862.

² Rennell's Memoir of a Map of Hindustan, 31. Nitra or Nitrias is more commonly identified with the Peripus (247) Naoura and so probably with Honávar (Lassen's Ind. Ant. III. 67). In 1819 its trade was insignificant. Málvan Resident to Gov. 31st May 1819; Revenue Diaries 141 of 1819, 2299.

³ Nairne's MS. Tieffenthaler (Res. Hist. et Geog. I. 513) described it (1750) as a very scarped rock strengthened with seven towers. It had a ditch on the land and was inaccessible from the sea.

⁴ Nairne's MS. Tieffenthaler (Res. Hist. et Geog. I. 513) described it (1750) as a very scarped rock strengthened with seven towers. It had a ditch on the land and was inaccessible from the sea.

⁵ A wing of the 89th Regiment; 24 battalions native infantry; 3 troops of native cavalry and artillery. Nairne's Konkan, 127.

⁶ The details were: the head-quarters of the IVth Rifles, crossing the river at Karli, arrived before Nivti on the 2nd February 1819. On the 3rd the batteries opened and on the following day the fort capitulated and was taken. Service Record of H. M.'s IVth Rifles, 29.

⁷ Gov. List of Civil Forts, 1862.

⁸ Blue Book on Marátha War, 1803, Nairne's Konkan, 115. Service Record of H. M.'s XX1st Regiment N I. (Marine Battalion).

attack was difficult and dangerous, as the assailants, a detachment of the Marine Battalion, had to climb a steep hill under heavy fire from two forts. On the north slope is a large temple grove, *devrân*, and at the foot in Dápoli, lies the village of Pálil, with, in 1872, 2596 people chiefly Chitpávan Bráhmans.

Pa'ndavgad Fort. See Málvan.

Pa'vas, up a small creek six miles south of Ratnágiri, had, in 1872, a population of 2652 souls. In 1819 it was a small port with very little trade.¹ The bold headland guarding the north entrance of the river is known as Pávas point.

Passes.² The chief passes are, Hátlot, Ámbavli, north Tivra, Kumbhárli, Mala, south Tivra, Kundi, Ámba, Vishálgad Shevgad, and Phonda.

Pedhe, or **Parashura'm**, a Chiplun village on the north bank of the Váshishti opposite Chiplun and the island and fort of Goval, had, in 1872, a population of 1530 souls most of them Bráhmans. On a high hill slope commanding a fine view of the river and close to the provincial road from Chiplun to Khed and Poládpur, the village is celebrated as the seat of the ancient shrine of the Konkan reclainer Parashurám, and as the traditionary birth-place of the powerful class of Chitpávan Bráhmans, whose head-quarters lie in the tract round Dápoli, Khed, and Chiplun.³ Before the time of Parashurám, so runs the story, the sea washed the Sahyádrí cliffs. Parashurám, who belonged to the priestly class, having subdued the Kshatriyás and given away all the lands above the Sahyádris, by shooting an arrow out to sea reclaimed the Konkan for his own use.⁴ The chief temple, dedicated to Bhárgavrám or Parashurám, is a central shrine surrounded by two smaller buildings. At the back of

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PANDAVGAD FORT.

PÁVAS.

PASSES.

PEDHE, or
PARASHURÁM.

¹ Collector to Gov. 15th July 1819: Revenue Diaries 142 of 1819, 2578.

² For further particulars, see Chapter VI. p. 116.

³ Of the Chitpávans, details are given above, p. 111.

⁴ The story of Parashurám is that he was the son of the Bráhman sage Jamadagni. Parashurám's mother and the wife of the great Kshatri king, Sahasrárjun, were sisters. The sage Jamadagni was poor, and his wife was forced to do all the household duties with her own hands. One day, fetching water, she thought of her sister's grandeur and her own poverty. As she was thus thinking the pitcher became empty. The sage asked her why her pitcher was empty, and when she told him how the water had leaked away, he blamed her for thinking her sister's state better than her own. She said; 'If I want to ask my sister there is hardly food for ten men.' 'I have,' the sage replied, 'food for ten thousand, but I do not think it wise to call a Kshatri to dinner'. She pleaded that they should be asked, and her sister and her husband came with a large following. From his wish-fulfilling cow and never-empty jar the sage satisfied the king and all his men. Learning the source of the sage's store of food, the king carried off the cow and the jar, and killed the sage, forcing him to lie on a bed of pointed nails. Grieved with the result of her foolishness the sage's wife committed suicide. Thus orphaned Parashurám vowed vengeance on the Kshatris. Attacking them with his axe, *parshu*, he broke their power, slew all who did not forfeit their birthright by mixing with the Shudras, and gave the whole of their lands to Bráhmans. Finding that he had left no land for himself, he prayed the sea, which then washed the Sahyádrí cliffs, to cast him up a kingdom. The sea refused and Parashurám determined to drive it back. Standing on the Sahyádris he shot an arrow westward and before it the sea retired. But the sea god had sent a friendly bee to bore Parashurám's bowstring, and the arrow fell short reclaiming only a strip about forty miles broad.

Chapter XIV.

Places of Interest.

PEDHE, or
PARASHURÁM.

the enclosure is a reservoir called in honour of Parashurám's shooting. the arrow spring, *bán ganga*. The temple, with a yearly income of about £250 (Rs. 2500) from cash allowances and the revenues of three villages, is visited by many pilgrims on their way from Benáres, Dwárka, and other sacred places to the shrine of Rámeshtar in the extreme south. Morning and evening at eight, when the idol is bathed and dressed, a gun is fired. A yearly festival on the third day of the first fortnight of *Vaishákh* (April-May) is attended by from three to four thousand people.

PORTS.

Ports. The Ratnágiri seaboard, stretching north and south for 160 miles, contains twenty-nine ports and harbours. Of the whole number, nine, Bānkot, Harnai, Chiplun, Sangameshtar, Ratnágiri, Rájapur, Khárepátan, Málvan, and Vengurla, are places of some trade and consequence; the rest are small, offering during the fair season more or less complete shelter to coasting craft, but with little or no trade.

Ratnágiri ports are of two classes, coast ports on sheltered bays and river mouths, and inland ports up tidal creeks generally at the point where navigation ceases. Dābhol in former times, and now Ratnágiri, Málvan, and Vengurla are exceptions. But from the ruggedness of the inland country, and in former times from their freedom from pirate attacks, trade has always centred at the inland harbours. The coast settlements have been little more than fishing villages with, in the fair season, some stranger merchants and a small traffic chiefly in salt and grain.

PRACHITGAD FORT.

PURANGAD

Prachitgad Fort. See Uchitgad.

Purangad, a village, in 1872, of 512 souls, on the brow of a barren point at the mouth of the Muchkundi river, twelve miles south of Ratnágiri, used wrongly to be called Rájapur.¹ In 1819 it was a small port with little trade.² The average yearly trade, during the five years ending 1877-78, was valued at £13,215 10s. (Rs. 1,32,155), of which £7267 8s. (Rs. 72,674) were exports and £5978 2s. (Rs. 59,781) imports. On the top of the hill is the small square fort of Purangad without outworks, covering an area of twenty-two acres. Under the Peshwa's government no revenue was exacted from fields within the fort as they were brought into cultivation by fort men, *gadkaris*. In 1829, though freed from service, these men still continued to enjoy the land rent-free.³ In 1862, except about thirty feet that had crumbled away, the walls were in good repair. It had seven guns and about seventy cannon balls all unserviceable.⁴ Even at high tide, the river admits only very small coasting craft, which ply as far as Sātavli about twelve miles inland.⁵

¹ Taylor's Sailing Directory, 389.

² Collector to Gov. 15th July 1819; Revenue Diaries 142 of 1819, 1578.

³ Lieut. Dowell, Survey Officer, 1st Nov. 1829; Rev. Rec. 225 of 1851, 254-255.

⁴ Gov. List of Civil Forts, 1862.

⁵ Dom João de Castro (1538) calling it the river of Betel, because much betel grew on its banks, describes it as having good water and a large and open mouth. The roadstead on the north was a gunshot from the rock. *Primeiro Roteiro da Costa da Índia*, 33.

Ra'ja'pur, north latitude $16^{\circ}37'50''$ and east longitude $73^{\circ}22'22''$, with, in 1872, a population of 5368 souls, the chief town of the Rájápur sub-division, is built on a slope rising from the water's edge, at the head of a tidal creek, thirty miles south-east of Ratnágiri and about fifteen miles from the sea. Rájápur is not now the port it once was. Vessels cannot ply within three miles of the old stone quay.¹ The bay, about three-quarters of a mile broad, passes inland for about a mile between steep laterite cliffs. It is broken into several small coves and inlets, into the largest of which, Tulsánda, on the south side, small vessels caught in a south-west gale can run. Well sheltered from north-west gales, with westerly winds a heavy short swell makes it, except on the north side, a not very safe anchorage.² Native vessels discharge and load at Jaytápur on the left bank of the river about four miles from the entrance, which among early European travellers shared with Rájápur the honour of naming the river. There is only seven or eight feet of water on the bar at low tide, but further in abreast Jaytápur are depths of from fifteen to twenty-four feet.

The oldest looking and best preserved town in the Konkan, its streets are steep and narrow and the markets paved and roofed. The old English factory, a massive stone building with an enclosure leading to the sea, now used as a Government office, and another equally large ruined European building probably the French factory, give the town a special interest. It is also peculiar as the one Ratnágiri port to which Arab boats still trade direct.³

In 1872, of a total population of 5368 souls, 3205 were returned as Hindus, 2156 as Musalmáns, six as Portuguese, and one as a European. Of the Hindus 621 were Bráhmans, 528 Vánis, 440 Bhandáris, 325 Telis, 144 Mhárs, 144 Shindás, 119 Kunbis, 101 Guravs, 99 Sonárs, 98 Maráthás, and 556 'Others'. Of the Musalmáns 838 were classed as Shaikhs, 38 as Patháns, 3 as Syeds, and 1277 as 'Other Musalmáns'.

During the fair season active communication is kept up between Bombay, the Malabár coast, and the Deccan. Every year a few Arab vessels from Zanzibár and the African coast bring fresh and dry dates to exchange for molasses and other produce. The average yearly trade, during the five years ending 1877-78, was £250,827 (Rs. 25,08,270), of which £122,558 (Rs. 12,25,580) represented exports and £128,269 (Rs. 12,82,690) imports. From Bombay, piece goods, metals, and miscellaneous commodities, and from Malabár, coconuts and betelnuts are imported for local use and for through carriage to the Deccan. From the Deccan, to meet local wants and for export to Bombay, come food grains, cotton, molasses, turmeric, chillies, tobacco, clarified butter, oil-seeds, and other products. Very little local produce is exported. The trade is

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Places of Interest.

RÁJÁPUR.

*Population.**Trade.*

¹ Collector to Gov. 2861, 21st November 1878.

² It is high water at full and change of the moon at 10 hours 45 minutes. Ordinary mean springs rise six feet five inches, neaps rise four feet five inches. Bom. Gov. Gazette, 3rd July 1879, 701.

³ Nairne's Konkan, 121.

Chapter XIV.**Places of Interest.****RÁJÁPUR.***Trade.*

almost entirely a through traffic. The system of trade is similar to that at Chiplun and other old fashioned isolated Konkan towns. Business is in the hands of local merchants, chiefly Bhátias, Bráhmans, and Musalmáns. A few paid agents of Bombay firms come down for the fair season to buy cotton and other goods, and arrange for freight to Bombay. Goods from the Deccan and Bombay are consigned to the local merchants. On arrival they are sold and re-sold to petty dealers, continually changing hands until they are distributed amongst the consumers or re-exported. The through trade is limited to the fair season (October-May), and as at Chiplun, during this busy time a large trading camp is formed, every available space near the market and the landing place being filled by temporary booths and warehouses. The chief streets are well kept and paved, and the permanent shops are substantially built. During the hot months, March, April, and May, the streets are shaded from the sun by a continuous canopy of plaited cocoanut leaves, stretching from house to house and making a temporary arcade. Transactions in exchange bills and sales of gold and silver are said to be larger here than at any town in the district.

Communication.

There is direct communication with Kolhápur and the neighbouring Deccan districts by a provincial cart road through the Phonda pass towards Nipáui, and by an easy bullock track over the Anaskura pass. By these two routes in 1877, 5540 tons of food grains, worth £46,400 (Rs. 4,64,000), were carried through Rájápur from Bombay to the Deccan. During the same season 48,000 carts passed from Rájápur over the Phonda pass. The trade of the town will be greatly benefited by the proposed telegraph line, which will place it in communication with Bombay and the leading Deccan marts, as well as with Ratnágiri, Vengurla, and Chiplun. A cart road over the Anaskura pass, a work long under contemplation, will also do much to revive the ancient commercial importance of Rájápur.

There are no manufactures of importance. The red powder, *gulál*, thrown about at *Holi* time (February-March), is made in large quantities and sent to Bombay and other places.¹

Buildings.

The town has a mámlatdár's office, a subordinate judge's court, a post office, a vernacular school and a native library, and is the seat of the chief police officer of the sub-division.

Municipality.

Rájápur was made a town municipality from the 1st April 1876. The revenue, chiefly from octroi duties, house-tax including water rate, pound fees, and licenses for the sale of poisons, amounted in 1877 to £160 (Rs. 1600), and in 1878 to £175 (Rs. 1750). In 1879, in consequence of reductions in octroi duties it fell to £378 (Rs. 3780). The streets are well lighted, a small conservancy establishment is maintained, and a dispensary is about to be opened.

¹ This powder, the dried and ground pith of the root of the wild banana in form like flour, is imported from Malabár and dyed at Rájápur with *patany*, *Cosalpinia sappan*.

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Places of Interest.

RÁJÁPUR.

Water.

The town is built on the sides of steep hills at the meeting of the Rájápur tidal river and a large rainy weather torrent called the Kodávli river spanned by a picturesque Marátha bridge. The water of the Rájápur river is brackish, and that of the Kodávli is nearly lost in the river bed above the town. Water can be found by sinking holes in the silt bed of the Kodávli. But as the town drains into it, and the river bed during the fair season is used as a camping ground, the water is foul and unwholesome. During March, April, and May, the scarcity of good water was formerly much felt. Cholera, small-pox, and other epidemics were frequent, and bowel diseases, due to impure water, were always present. The town is laid out in very narrow paved streets, rising in tiers one above the other on the hill side, and though the roofs are mostly tiled, in the hot season when water was scarce, disastrous fires have been frequent.

As far back as 1826, an energetic native official, observing that the torrent of the Kodávli river was each year dammed by the villagers at a point three miles above the town, hollowed a rough earth channel, and succeeded in bringing a little water to the top of the hill behind Ratnágiri. The scheme was shelved for want of funds till the municipality, under the presidency of Mr. A. T. Crawford, C. S., adopted, and at a cost of about £3000 (Rs. 30,000), carried to completion the works which now supply the town. Half of the cost was met by popular subscriptions and current municipal income; the remaining £1500 (Rs. 15,000) were, with the sanction of Government, raised by a loan in the open market. The head works are a masonry dam 130 feet long and 17½ high. The lake thus formed, upwards of half a mile long and with an average breadth of 250 feet, contains about 60,000,000 gallons of water. The draw-off for the present Rájápur population being only 100,000 gallons a day, the balance is applied to irrigation. On the north side a sluice one and a half feet square supplies the water required for the irrigation of the fields below the site of the dam, and on the south side are the outlet works and pipe for scouring the bottom of the lake. The supply pipe, six inches in diameter, discharges into a small reservoir, thus breaking the head of water. Its top is about four feet under the surface of the lake. Below the top are two openings fitted with plugs, and as the surface of the lake sinks, each of these is opened in turn, the discharge being governed by a sluice. After passing from the lake through the pond, the water enters a slab-covered concrete-lined channel fifteen inches high and one foot wide cut in the hill side. The channel following the outline of the hill, with an average fall of nine feet a mile, and by syphons and aqueducts crossing several water-courses at a point where the hill slopes abruptly towards the town, flows through a filter into a service reservoir capable of holding three days' water supply for the present population of the town. From the reservoir the water is distributed through the town by cast and wrought-iron pipes of various sizes from a half to four inches. In every convenient position stand-pipes are raised for the use of the public. Fire plugs have also been fixed at every 200 feet along the various mains, and the necessary hose has been provided, the pressure being sufficient to throw water over the

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RAJAPUR.
History.

highest houses in the town without the aid of a fire engine. Small branch pipes for the supply of private houses are fitted up on the application and at the expense of the occupants.¹

At the time of the first Musalmán conquest (1312), Rájápur was the chief town of a district.² In 1638 it is said to be one of the best Deccan maritime towns.³ In that year Courten's Association established a factory at Rájápur, and ten years later (1649), the Musalmán governor offered the trade to the Presidency of Surat, and because of its pepper, cardamoms, and freedom from Dutch interference, the offer was accepted.⁴ In 1660 and 1670 Shiváji plundered the town sacking the English factory. In 1673 it is mentioned as then a French and formerly an English factory.⁵ In the terms of a treaty with Shiváji the factory was again established, but it was never profitable.⁶ In 1686, after the unsuccessful expedition of Aurangzeb's son Sultán Muazzam, his brother Sultán Akbar, who had long been in rebellion against his father, hired a ship commanded by an Englishman, and embarking at Rájápur, sailed to Maskat, and from Maskat went to Persia.⁷ In 1713 Rájápur was handed over to Angria.⁸ About this time (1719-1720) Hamilton states that formerly both the English and French had factories, and that the country produced the finest *batelás* and muslins in India. Now (1720), he adds, 'arts and sciences are discouraged and the port deserted'. He noticed its fine artificial water cisterns and a natural hot bath within three yards of a cold one, both reckoned medicinal.⁹ In 1756 it was taken by the Peshwa from Angria.¹⁰ In 1819 Rájápur was, in the extent of its trade and in the number and wealth of its people, much ahead of any other south Konkan port. The river was not very good, large boats having at one-third of the way up to move their cargoes into small boats. But trade was encouraged by specially easy rates. The inland trade was through the Anaskura pass to all the chief towns of the Marátha states. In 1818 the total value of the imports was returned at £52,688 4s. (Rs. 5,26,882) and of the exports at £23,217 2s. (Rs. 2,32,171). The chief items were, among exports, hemp £6101 10s. (Rs. 61,615), piece goods £5147 (Rs. 51,470), turmeric £2707 14s. (Rs. 27,077), molasses £1426 4s. (Rs. 14,262), cotton £1210 14s. (Rs. 12,107), salt £1086 14s. (Rs. 10,867); and among imports, cocoanut kernels £16,689 8s. (Rs. 1,66,894), dry dates £7611 2s. (Rs. 76,111), coconuts £2928 18s. (Rs. 29,289), grain £2595 (Rs. 25,950), and incense £1466 6s. (Rs. 14,663).¹¹ In 1834, Rájápur was a great mart for goods to and from the Karnatak and Southern Marátha Country. The exports were cloth,

¹ Collector to Commissioner S. D. 3104, 1st December 1878.

² *Jervis Konkan*, I. 81. As so many names along the Konkan coast are Grecized, it seems probable that Ptolemy's (450) Turannoshoas is Rájápur. See above, p. 308.

³ Mandelslo in Harris, II. 130.

⁴ Bruce's *Annals*, 344, 357, 368 in Nairne's *Konkan*, 120.

⁵ Fryer's *New Account*, 59.

⁶ Grant Duff, 118. ⁷ Nairne in *Ind. Ant.* II. 220.

⁸ Hamilton's *New Account*, I. 246.

⁹ Málvan Resident to Gov. 31st May 1819.

¹⁰ Grant Duff, 186.

¹¹ Nairne's *Konkan*, 92.

clarified butter, and pepper; the imports dates and other dried fruits, and iron. The population, estimated at 1000 houses exclusive of strangers, was always numerous in the dry season. There was a great stir among the people, and a good deal of business in the hands of Gujars, Cutchis, and Musalmáns, and a large number of Vanjáris. It had one Hindustáni and three Maráthi schools.¹

The only stronghold is a small fort, *gadi*, on the right bank over the river, now used as the mámlatdár's office. On slightly rising ground with a filled up ditch on the south side, the fort is a strong masonry building surrounded by a wall with two bastions. In 1818 it was taken possession of by the troops under Colonel Imlack.² In 1862 the building was strong, but the wall, except one bastion, was somewhat broken. Water was plentiful and supplies could easily be obtained. There were four old and unserviceable guns.³ The English factory, now used as a Government office, seems to have been started in 1649 and closed in 1708.⁴ During this time the factory suffered greatly from the disturbed state of the country. It was sacked by Shiváji in 1661, and as a punishment for furnishing the Bijápur king with war stores, the factors were imprisoned until a ransom was paid. The factory was closed at a loss of £3718 (10,000 *pagodas*). In 1668 it was re-established, but after two years (1670) was again plundered by Shiváji and withdrawn.⁵ Restored in 1674 it was again closed in 1681. It was for a fourth time opened in 1702, but after about ten years was finally withdrawn.⁶ Of the French factory, now in ruins, little is known. It was probably started about 1667,⁷ and was sacked by Shiváji in 1670.⁸ Whether it was again opened is not known. It was closed before 1710.⁹

The hot spring mentioned by Hamilton at the foot of the hill about a mile from the town, is still, for its virtue in curing rheumatic and skin diseases, much frequented by natives. The water from the side of the hill, about 300 yards from the south bank of the river, flows into a ten feet square stonepaved cistern, and thence through a short pipe ending in a stone cow's head, pours in a full stream into the river. With a temperature of about 120° the water has no special taste or smell.¹⁰

About a mile from the hot spring is a spring whose water flows

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Places of Interest.

RÁJÁPUR.

Fort.

Factory.

¹ Oriental Christian Spectator, V. 110 (1834).

² Service Record of H. M.'s IVth Rifles, 28.

³ Gov. List of Civil Forts, 1862.

⁴ It was here that the able but unfortunate Sir John Child, afterwards (1682-1690) President of the Company, spent several of his first years in India. The Factor at Rajápur was his uncle, and according to Captain A. Hamilton, who never lets a chance of abusing him pass, Child drew the notice of the Company to some irregularities on his uncle's part, and in reward, at the early age of twenty-four, got himself appointed his uncle's successor. New Account, I. 245.

⁵ Bruce's Annals, II. 399.

⁶ Nairne's Konkan, 120; Hamilton's New Account, I. 246.

⁷ On 15th October 1667, the first French factory was established at Surat. Milburn's Oriental Commerce, I. 381.

⁸ Bruce's Annals, II. 399.

⁹ Hamilton's New Account, I. 246. Mr Nairne (Ind. Ant. III. 319) mentions that the Dutch had at one time a factory at Rajapur.

¹⁰ Trans. Bom. Geo. Soc. VII. 159 (1846).

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Places of Interest.

RĀJĀPUR.

at uncertain times, never more than once in two years. The usual season of its flow is in the hot months, rarely or never during the rains. It suddenly begins, flows for two or three months, and dries up without warning. It is held in great reverence and called a Ganga. Immediately the flow begins, Hindus from long distances come and bathe, first in the hot spring and then in the cold intermittent spring. A number of small ponds have been built for the use of the bathers. As in similar cases the spring is probably a natural syphon. In the middle of the town is a temple of Vithoba with a large rest-house used by travellers and religious beggars. Fairs in honour of the god are held twice a year in *Āshād*h (June-July) and *Kārtik* (October-November), when a considerable crowd of people assemble.

The large Musalmán population have a number of mosques built in different parts of the town. None are of any size or architectural beauty. The Jáma or chief mosque is near the Kodávli bridge. No other old Musalmán remains have been discovered.

RĀJKOT FORT.

Rāj'kot Fort. See Málvan.

RĀMGAD FORT.

Ra'mgad Fort, on a hill within the boundaries of Belebudruk village in the Málvan sub-division, is a citadel with an area of about eight acres. Except a towered wall leading to a reservoir, there are no defences. The walls about eighteen feet high, ten thick, and more than 700 yards in circumference, have fifteen small towers most of them with three embrasures. The west gateway is an eight feet wide and fifteen feet long passage, lined with stone steps between the fort wall and a tower about eighteen feet high and eighteen in diameter. Inside the fort are the commandant's house, and an interesting ruined temple about thirty-six yards square.¹ In 1862 the walls were in a dilapidated state. There was no garrison and no water. There were twenty-one guns and 106 cannon balls all old and use-less.² Rāmgad surrendered on the 6th of April 1818 to a detachment of the IVth Rifles under Captain Pearson.³

RANDPĀR.

Randpa'r, a village of 500 souls, lies at the top of the snug and deep little cove of Pávas, about six miles south of Ratnágiri.

RASÁLGAD FORT.

Rasa'lgad Fort, in Khed, at the south end of the spur which further north is crowned by the Sumárgad and Mahipatgad forts, has an area of about five acres. Less elevated than either of the above forts, Rasálgad is approached by an easy ascent which begins on the west and is about three miles from the village of Mándva. Narrow in the north, the fort gradually broadens, dividing in the south into two spurs, one running to the south-east the other to the south-west. The fort is entered from the north by a very massive gate guarded by a tower and high battlements. In a crevice in the wall opposite the gate is an image of Māruti the monkey god. About eighty yards inside is a second gateway

¹ Mr. R. B. Worthington, C.S.

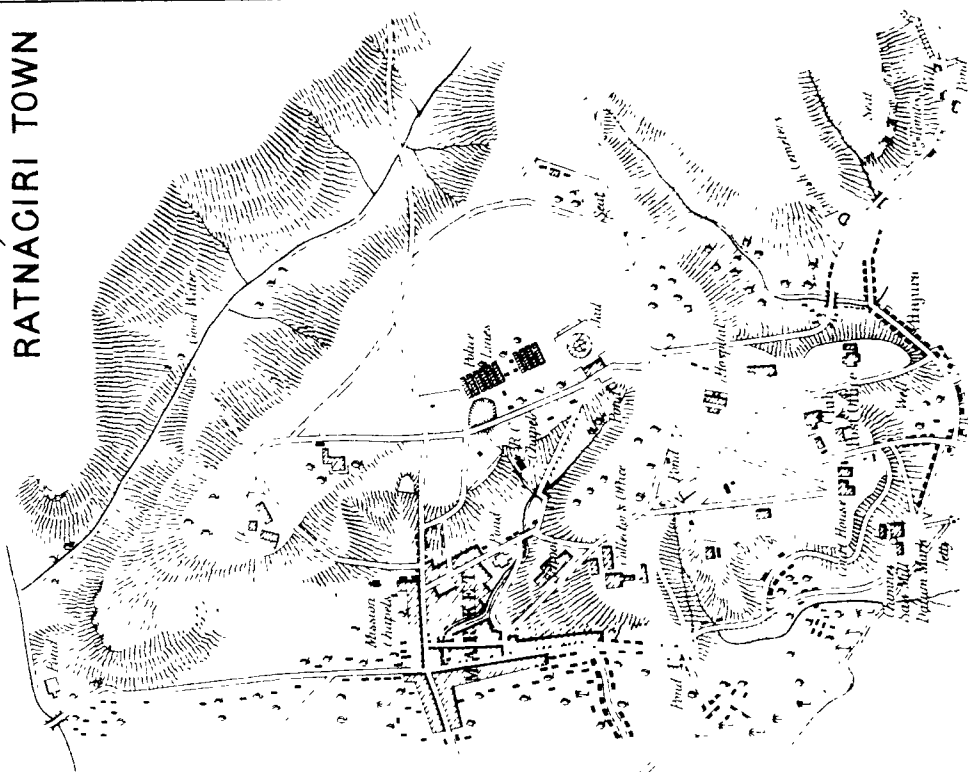
² Service Record of H. M.'s IVth Rifles, 23.

³ Gov. List of Civil Forts, 1862

RATNAGIRI FORT



RATNAGIRI TOWN



Scale 1 inch = 2 fathoms or 1200 feet

also strongly guarded by a tower and battlements. Further south, where the ground broadens, there is a temple with some rich wood carving. This temple, dedicated to the goddesses Zoláya and Vágháya, is of some local sanctity forming every year the gathering place of bands of worshippers from fourteen neighbouring villages. Both the spurs of the hill beyond the temple are fortified. On the south-east spur is a roofless building once used as a storehouse. Beyond the storehouse are some pools, with near their banks several memorial stones with very dim weather-worn tracery. The spur after about 300 yards ends in a battlement known as the Pusáti's Tower. The south-west spur is much more strongly fortified. The defences known as the upper fort, *bíla killa*, about 186 feet by 126, are surrounded by walls, with, at each corner, an embrasured battlement. Inside are the ruins of a powder magazine and of the commandant's house. The temple of Zoláya and the image of Máruti show that the fort was built and for a time held by Hindus. The only trace of Musalmáns is in the Upper Fort, a battlement known as the saint's tower, *pir burnj*, on which there are apparently three graves. Except at the north gateway and in the Upper Fort, the masonry defences are neither high nor massive. In 1854 the fort contained thirteen old iron guns dismounted and partly buried in the earth, some with a crown on one trunnion and E. R. on the other. One had the date 1720. Water, in hollowed reservoirs, was neither abundant nor good. On the east of the ridge below the gateway was a small village called the Petha. The fort was considered sacred and a yearly fair held in it. In front of the temple were several scaffoldings for hook swinging.¹ In 1862, it is described as ruined, with no garrison, scanty water, and no supplies.²

Ratnágiri, north latitude 17° and east longitude 73° 19', with, in 1872, 10,660 people, the administrative head-quarters of the district, lies facing the sea, 136 miles south-east of Bombay. Ratnágiri Bay, about two miles broad and one mile deep, has along its north shore a long flat fortified headland from 200 to 300 feet high, joined to the mainland by a narrow sandy neck. The south shore ending seawards in cliffs and boulders is rocky throughout. About half way between these two headlands a small river falls into the bay. On either side of the river mouth is a low shore fringed to the north with cocoanut trees, and to the south, sandy and flat, broken by occasional patches of palms. To the north of the river mouth, on a plateau about 150 feet high overlooking the sea, are the Judge's court-house and the dwellings and offices of the European residents. Behind this hill and between it and the fort, the town stretches about a mile and a half to the north-east.³

Chapter XIV.**Places of Interest.**

RASÁLGAD
FORT.

RATNÁGIRI.

¹ Report on Rasálgad, 1854. Mr. A. T. Crawford's MS.

² Gov. List of Civil Forts, 1862.

³ The present town consists of four originally distinct villages, Kille-Ratnágiri or the fort and the land round its immediate base, Jhadgón, Rahátgad, and Peth Shivápur. In 1822, on the transfer of the district head-quarters from Bankot to Ratnágiri, these villages were merged in Ratnágiri town.

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Places of Interest.

RATNÁGIRI.
Port Details.

During the north-east monsoon (October-June) the landing place is at the custom house, about half a mile from a small round tower at the foot of the headland under the fort. In landing, a good lookout must be kept for rocks, as large reefs stretch west almost as high as low tide level, rising in isolated patches. During fair weather westerly gales, which sometimes last for three days, a heavy swell rolls in and landing is difficult, and in the south-west monsoon (June-October) it is generally impossible. Except at high water,¹ when if the sea does not break on the bay, it is passable for large native craft, the river entrance is not safe. At the south end of the bay, about half a mile from the shore, a reef rises above water, falling away in a rocky bank of from two to three fathoms that stretches west, its outer edge five fathoms deep, bearing south from the light-house.

Water

In the village of Náchni, about two and a half miles east of the town, the rugged laterite plateau, which rises from the cliff with a gentle slope, is cut by a deeply scoured and picturesque ravine, through which a perennial stream of very pure water falls abruptly into the creek below. Mr. A. T. Crawford conceived the idea of conducting this stream into the town of Ratnágiri. The rocky bed has been dammed by a masonry weir, and the water is carried through a covered concrete channel for about three miles with a fall of about twenty feet, to the edge of the plateau overhanging the town. For the first 2000 feet of its course the channel is two feet, and for the remaining section one foot wide. At the end of the channel is a reservoir 100 feet square. From this reservoir iron pipes are laid through all the chief quarters of the town. Stand pipes with spring cocks have been set up in all the streets at convenient distances, and house connections will be made for all who require them. The supply freely meets the wants of the people, and the water has head enough to rise to the highest parts of the station and native town. The work, estimated to cost about £3500 (Rs. 35,000), has been carried out almost entirely by convict labour. The works were opened on the 5th May 1880. Formerly the water supply, drawn entirely from wells, had during March, April, and May been scanty.

Population

Of 10,614, its total (1872) population, 7154 were Hindus, 2997 Musalmáns, 29 Europeans, and 74 'Others'. Of Hindu castes the best represented are the Bhandáris with 1755 souls, next the Bráhmans with 1155, the Kunbis with 955, the Vánis with 790, the Maráthás with 615, the Telis with 446, the Sonárs with 214, and the Satárs with 164 souls. Most of the Musalmáns are Dáldis whose chief industry is fishing. There are besides a considerable number of Deccan Musalmáns and a few Khojás.

Trade.

In 1878 the exports amounted to £13,222 (Rs. 1,32,220), and the

¹ It is high water at full and change of the moon at 10 hours 52 minutes, ordinary mean springs rise six feet, and neap's four and a half feet. *Bom. Gov. Gazette*, 3rd July 1879, 699.

imports to £60,567 (Rs. 6,05,670).¹ During the fine season (October - June) vessels of the British India Steam Navigation Company call weekly on Sundays, bringing the Saturday's mails from Bombay, and thrice a week small steamers also run to the chief coast ports. During the south-west monsoon, the mail steamers land passengers and goods at Kálbádevi bay at the back of Mirya hill about five miles to the north, to which at a cost of £270 (Rs. 2700) a good road has been made. This road, passing through the market by a causeway or embankment, crosses the south end of the Shirgaon creek. Thence turning north, it skirts the low swampy flats between the sand hills of the Mirya bay and the creek, and passing through the salt works and groves of cocoa palms, winds over higher ground round the foot of Mirya hill to the landing place in Kálbádevi bay. In some places by the side of the Shirgaon creek the road is available as a wharf for loading native craft.

There are no manufactures of any importance. Craftsmen trained at the school of industry work well in wood and iron, and at the jail factory, cotton cloth of fair quality is woven and good cane work done. At Juva, a village a few miles up the Ratnágiri creek, shell lime is calcined in considerable quantities both for local use and for export. Coarse pottery is also manufactured for local sale.

In 1878 Ratnágiri was constituted a town municipality. No octroi duties are levied; the income, which amounted in 1879 to only £55 8s. (Rs. 554), is chiefly derived from a house-tax. In addition to this a small conservancy establishment is kept up from the proceeds of a separate sweeper, *hulálkhor*, cess, levied from the owners of private privies. The streets and the steamer landing place are lighted, and a travellers' or staging bungalow kept up. The municipality has taken over the water works and imposed a water rate which yields about £280 (Rs. 2800) a year. On this security it is raising a loan to repay the cost of the works to the district local funds.

As the chief town of the district and the head-quarters of the sub-division, Ratnágiri has the offices of the Collector and his assistants, the Judge and his assistant, the superintendent of police, the executive engineer, and those of the *mámlatdár*, the subordinate judge, and the chief constable. It has besides a revenue survey office, a custom house, a jail, a civil hospital, a leper hospital, a post office, a high school, three vernacular schools two for boys and one for girls, a school of industry, five private schools, one mission school, and one Vedic school. There is also a club for European officers, with library, reading room, covered racket court, swimming bath, gardens and recreation grounds, a native library and reading rooms. These buildings come in the following order: the revenue office, *kacheri*, on the top of the hill on the main road leading to the native town, contains the Collector's residence, the treasury, the registry English and vernacular

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RATNÁGIRI.
Trade.

Manufactures.

Management.

Buildings.

¹ The yearly average of trade, for the five years ending 1877-78, was £101,047 4s. (Rs. 10,10,472) of which £52,915 4s. (Rs. 5,29,152) were exports and £48,132 (Rs. 4,81,320) imports.

Chapter XIV.
Places of Interest.

RATNÁGIRI.
Buildings.

offices, and in detached buildings within the same enclosure, the assistant collector's and the mamlatdār's offices.¹ Opposite the Collector's residence and office are the high school, the subordinate judge's court, the civil jail, the principal offices of the Ratnágiri revenue survey, the native library, and about a quarter of a mile to the south, a staging bungalow. On the same plateau overhanging the cliff, are the Judge's court, *adīlat*, including the Judge and assistant judge's courts and the Judge's residence. A little further inland stand, dotted about in an irregular group, the civil hospital, the post office, the Ratnágiri club for European officers, the executive engineer's office, the criminal jail, the police office and head-quarters lines, and the private residences of the European officers. The chief buildings in the native town below the ridge on which the houses of the European residents are built, are the machinery sheds and workshops of the school of industry, the Roman Catholic and American mission chapels, and the custom house. There is no Protestant church. The Roman Catholic church, a little to the south-east of the town, is forty-five feet by twenty-one, with a chancel thirty feet by fifteen, and a façade thirty-five feet high and thirty broad. Of the chancel and vestry, the original portions are supposed to have been founded on the introduction of the Catholic religion into Goa. In 1826, a Mr. Antonio Cabral added the body of the church and the priest's house. A freshly gilt wooden altar, brought a few years ago from the convent of St. Francis d'Assis in Goa, is dedicated to Our Lady of Miracles. The congregation, numbering sixty in the fair season and 150 in the rains, consists of public servants, shopkeepers, and the servants of Government officers. None of them are natives of the district. Affiliated to the church are two chapels, one at Harnai dedicated to Lady Saint Anna, and the other at Dápoli dedicated to Our Lady of Piety. At Harnai the parishioners, mostly labourers and natives of the place, number 230. At the Dápoli chapel, said to have been built by one Gabriel Baptista, the parishioners all Goanese, are only ten in number.

*Burning and
Burial Grounds.*

The European graveyard is on the hill side, a little above the Ratnágiri creek, near the Musalmán quarter of Rájivda. Dating from 1822 it contains a number of graves and memorial stones. Among them is a handsome white marble cross raised by his friends in memory of Mr. R. W. Hunter of the Bombay Civil Service, Judge of Ratnágiri, who died in June 1875. The Hindu burning ground is on some low sand hills at the foot of the fort, and at the south end of Mirya Bay. The Musalmáns have four burial grounds in different quarters of the town, at Rájivda, Partávna, the fort, and near the fish market.

History.

Under the Bijápur dynasty, unlike most of the district which was held or farmed by hereditary superintendents, *deshmukhs*, Ratnágiri

¹ The Collector's vernacular office, the registration, and the Collector's record rooms are in one detached building, the first and second assistant collectors' offices and the mamlatdār's are all three in another, and a third small detached building accommodates people waiting to transact business.

formed a state possession governed by state officers. No notice of Ratnágiri has been traced among the early European accounts of the coast. In 1731, on the partition between Kolhápúr and Sátára, Ratnágiri was given to Sháhu the Sátára chief.¹ In 1783 it was the head-quarters of one of the Peshwa's districts. In June 1818 it was quietly surrendered to the British, and in 1822, after weighing the advantages of it, Jaygad, and Vijaydurg, Ratnágiri was chosen to be the British head-quarters.² In 1819 it was a large village, but from the shallowness of the river had very little trade.

The Ratnágiri Fort³ is a series of fortifications on the high headland which forms the west end of the north arm of the Ratnágiri harbour. This headland, in shape like a horse's foot with the toe pointing south, the sides each about 1320 yards long and the heel or broad north end about 1000 yards across, has a total area of about 120 acres. From its north-east end, where it is joined to the mainland by a low isthmus about 440 yards broad, the headland rises from about 200 feet in the north to 300 in the south. From the extreme south point, where there is a light-house, passing north along what may be called the west half of the foot, the hill, with very steep western cliffs, quickly falls to about 100 feet above sea level, and then at the north-west end of the heel, rises again as suddenly into an isolated fortified hill 200 feet high, known as the citadel, *bála-killa*. The broad north face of the headland, concave in shape, forms a bay with the citadel as its western, and the north end of the eastern face of the headland as its eastern arm. At the head of the bay is a large village with good water and many palm trees, and much dry crop and a little rice tillage. The villagers, of whom there are about forty households, are of many castes and classes, Bráhmans, Parbhús, Maráthás, Bhandáris, Musalmáns, Dáldis, Sútáris, Telis, Nhávis, Kulvádís or tilling Maráthás, Guravs, and Arits the descendants of the followers and dependents of the old garrison.

The defences of the headland form an outer and an inner fort. Starting from the isthmus in the north-east, about the middle of the south-eastern side, facing Ratnágiri town, stands the main gateway of the outer fort, in very good order, with the usual massive iron boxes and spikes to ward off elephants. South from this gateway to the light-house point, the eastern ridge is crested by a very high and massive wall. Between the light-house point and the citadel, the west side, falling in sheer, sometimes overhanging cliffs, is fortified only at the extreme south and north ends. Passing north from the south or light-house end is a long stretch of cliff said to have been once topped by a wall, but of this no trace remains. At the extreme north-west are the isolated and very strong fortifications of the inner fort or citadel, *bála-killa*. Along the bay at the north end of the headland from the citadel fortifications, a very strong, wide and high wall runs along the shore with

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RATNÁGIRI.

History.

Fort.

¹ Grant Duff, 223, Nairne's Konkan, 80.

² Nairne's Konkan, 129.

³ Contributed by Mr. J. L. Johnston, C.S., Assistant Judge, Ratnagiri.

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Places of Interest.

RATNAGIRI.
Fort.

bastions at close intervals. Near the village at the head of the bay a massive gateway shelters the landing place, *bandor*. These low north-shore defences are, according to local story, the work of the Pratinidhi Dhondu Bháskar (1790). From the gateway along the eastern arm of the bay, a wall runs up the north end of the eastern or isthmus face, and there, strengthened by a specially large bastion, turns at right angles south along the crest of the eastern ridge.

The citadel, *bálu-killá*, with an area of six and a half acres, standing by itself on the flat isolated north-west point, forms a separate fortification, tenable against an enemy holding the outer fort without artillery. Enclosed by massive stone walls, it has one gateway in good order, and though the walls are broken in places, it is, from the sheer drop of the north and west cliffs, inaccessible except by this gateway. Inside are a temple of Bhaváni or Bhagvati, with a yearly cash allowance of £5 1s. (Rs. 52), a pond, a very deep well dry in the hot months, and a *pimpal* tree strikingly large and fresh, though it rises from the laterite rock many feet above any possible store of fresh water. At the north-east and south-west corners of the foot of the citadel rock, cave-like openings, stretching for some distance inwards, are believed to be in communication with the citadel. They are supposed to have been posterns or sallyports prepared for secret flight in case of the capture of the fort from the land side. The fortifications are said to be partly Musalmán partly Marátha. According to local accounts the oldest are the shore works in the north face of the headland, where, between the foot of the citadel, *bálu-killá*, and the north landing place, *killá bandar*, a tower was built, and the citadel hill slightly fortified. According to the local story these defences were begun under the Bahmaní kings (1343-1500). But the evidence of the Bahmaní's hold of Ratnágiri is so slight that it seems more likely to have been the work of a Bijápur officer (1500-1660). Shiváji, who is said to have gained possession of the fort about 1670, added or renewed the strong wall that crests the eastern ridge south to the light-house point, and built protecting towers on two commanding points, one to the south on the site of the present court-house, *adilát*, the other to the north on Mirya hill. The tower on the light-house point, known as the Sidda Buraj, is said to take its name from a captain of the guard who was killed in battle with Dhulap, the famous pirate chief of Vijaydurg. In the eighteenth century the citadel defences are said to have been improved by the Ángrás (1710-1755), and completed by the Peshwás (1755-1818). In 1862 the fort was out of repair, and its 117 guns were all honeycombed and useless.¹ In this state it has since remained.

Light House.

On the south bastion of the outer fort, 300 feet above the sea, a small white masonry tower, twenty-two feet high, has a fixed red light of the sixth order, shining in clear weather from eight to ten miles.

¹ Gov. List of Civil Forts, 1862.

Redi,¹ more properly YASHVANTGAD, is a very fair specimen of the forts built about the time of the break up of Musalmán power (1660). According to Grant Duff it was built by Shiváji about the same time (1662) as he built the great island fort of Sindhudurg at Málván. But it is probable that Shiváji only repaired a fort previously held by the Sávant for the Bijápur kings. In 1817, when it was in the hands of the Sávant chiefs, the fort was besieged by the Goánese who planted their guns on Hasta Dongar hill, and though too far off to do it much harm, the marks of the battering still remain on the south walls of the citadel palace. Failing to take the fort they are said to have cut down the neighbouring palm groves and decamped. In 1819, in accordance with an agreement made some years before (1812) with Phond Sávant,² the English came to Redi to take the fort from Sambláji Sávant. Their batteries opened on February 13th, and in the evening of the same day the outworks were carried by assault, and next morning the fort surrendered.³ The marks of the English cannon balls are still visible on the north end of the west side of the palace.

Built on the south side the fort commands the mouth of the creek. The citadel stands on a hill, which, with a large piece of the surrounding plain, is enclosed by an irregular outer wall. A little above the fort the creek is joined by an estuary, the water of which protects the eastern, and a short branch of it washes close along the foot of the southern fortification. At the south-east corner of the wall is some ruinous masonry apparently guarding a sluice, by which probably the level of the water could be kept up at low tide. The land to the south-east was probably formerly under water at high tide and an impassable swamp at low tide, for the whole of the outer defences of that side of the fort seems to be much slighter than elsewhere, the wall ceasing to be fortified and becoming more like a dam than a fort wall. Along the south-west there are low fortifications and a small pass ending in a gate, from which a towered wall stretches to the sea. Thus the whole line of circumvallation, about $1\frac{1}{2}$ miles, intercepts a long strip of smooth sandy beach about a quarter of a mile in length. Of the whole space enclosed by the walls the eastern half is taken up by the hill and citadel, and the western half by a plain, now covered by a palm grove and a small cluster of houses. The outer wall is armed with round towers, the strongest of them about twenty feet high and joined by a loopholed curtain about seventeen feet high. Through the gate of the outer wall a paved road, passing up the central citadel hill, is crossed by a wall that runs from the citadel to the outer fortifications. Through a gate in this wall is a square court, and up a flight of steps and through a third gate is the citadel. From their

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REDI FORT, OR
YASHVANTGAD.

¹ Contributed by Mr. R. B. Worthington, late Bombay Civil Service.

² Mr. Courtenay's Memoir, 36. In 1812 this chieftain promised that if hereafter any Vádi subjects were guilty of piracy, the forts of Redi and Nirvi should be given up to the Honourable Company.

³ While the English ships were outside the mouth of the creek, the Sávant's war vessels lay inside. This seems to show that the creek must since have silted a good deal, as at present no vessel of any size can enter. Mr. R. B. Worthington, C.S.

Chapter XIV.**Places of Interest.**REDI FORT, OF
YASHVANTGAD.

outer foundations the walls of the citadel stand about twenty-five feet high, and close under them circling all except the south-east corner of the wall, is a dry ditch or trench twenty-four feet wide and about thirteen feet deep, cut in the solid rock, its side opposite the wall being a sheer perpendicular. Towards the north-west the side of the moat opposite the wall is lined with masonry. In the south-east corner, where there is no moat, the wall is built rather to protect the besieged from distant artillery than to carry guns. It is not easy to see over, and the ground outside is divided by walls leading from the citadel to the outer fortifications. The square court in front of the citadel entrance is on a much lower level than the citadel itself, the top of its walls being about seventeen feet lower than the top of the citadel. Its walls are ten feet thick and twenty feet high, and it has round towers at the corners twenty-five yards apart measuring from centre to centre of the towers. The whole court is enclosed within the moat. The walls of the citadel are about twelve feet thick at the top, with a semicircular tower at about every sixty yards, intended for great guns. The circumference of the citadel is about one-third of a mile. The plateau inside is almost perfectly level. The palace is a double square with oblong towers at opposite corners. Its timbers have been carried away, and the only interesting point about its architecture is the question whether it may possibly be Portuguese.¹ The fort walls are in good preservation, and the buildings are still habitable. Some years ago the fort was occasionally used as a sanitarium for Belgaum troops. Within the fort walls is a police station.

*Hasta Dongar
Cave.*

On the Hasta Dongar hill, where, in 1817, the Goáneses planted their cannon, is a cave hollowed in the face of the rock. It is a square opening rather more than six feet deep, not six feet high, with a little terrace about ten yards long across its front. It commands a view of Akhali, a rocky island containing an image of the demon god Vetál. On the side of the same hill, under a bold overhanging black rock, is a larger cave about six and a half feet high, nine feet deep, and increasing in breadth from twelve feet at the entrance to seventeen inside. The local story is that the caves are sacred and were cut a thousand years ago when Redi was called Pátan or Pátua. Of the ruins of old Redi lying west and south of the outer wall of the fort, very little masonry is left. But the ground has been considerably dug as if for building stone. The ruins fill the angle formed by the continuation of the southern shore of the creek and the sea coast. Just at the point of this angle is a very singular island or promontory of solid rock, broken off from the mainland. It is a huge mass of stone so steep all round, as, except at one place, to be most difficult to climb. It is covered with shrubs and trees of which one is very large, and with its ample foliage surmounting the steep rock, forms a most conspicuous

¹ See Bom. Gov. Sel. X. 157. It may be that the fort once belonged to the Portuguese and that the palace was a monastery.

object for many miles. On the flat top of this rocky island is a curious stone almost buried in the earth. It is about seven feet long, and in shape like the image of a man lying face downwards, the spine being represented by a projecting ridge along the middle. It might be the pillar of a temple, but is more like the top of a sarcophagus. Tradition calls it an image of Vetál, king of the ghosts or goblins, *pishúch*. It is held in much local respect, and in Mr. Worthington's opinion, who visited it in 1878, well deserves careful examination.

Rock Temples. The Ratnágiri rock temples are not of much importance, almost all of them are early Buddhist, cut probably between B.C. 200 and A.D. 50. The chief caves are at Chiplun, Dábhól, Khed, Kol, and Sangameshvar. At Vade-Pádel and at Ságva both near Vághotan, are some ruined cells probably Bráhmanic.¹ To what class the Hasta Dongar cave belongs has not yet been fixed.

Sangameshvar, north latitude 17° 9' and east longitude 73° 36', a town on the Shástri river, about twenty miles from the coast, with, in 1877, 2475 people and 693 houses, has some trade in grain, piece goods, and salt fish. The river, within the last thirty years navigable for the largest vessels to the very Sangameshvar quay, is now impassable for six miles lower down.

Sangameshvar's decline is chiefly due to the silting of the creek, and partly, since a cart road has been made through the Kumbhárli pass, to the turning of the through Deccan and Bombay trade to Chiplun. The pack traffic through the Mala pass is, of imports, piece goods and other articles, and of exports, cotton. During the 1877 famine, 1440 tons of grain were forwarded from Bombay through Sangameshvar to the Deccan. The opening of a cart road through Devrukh to the Ámba pass to the south-east will greatly benefit Sangameshvar. But till the Mala pass has been opened for carts, the town will not recover its past importance. The trade is entirely in the hands of local merchants, chiefly Vánis. On a much smaller scale, the system is the same as in Chiplun. Light booths are raised during the fair season, and a trading camp is formed, to be broken up at the first burst of the rains. The market on the hill side above the narrow river bank suffers almost every year from fire. Early in 1878 fifty-five houses were burnt, and a few weeks later (March 16th) a disastrous conflagration completely destroyed the mámlatdár's office, the treasury, the police lines and outbuildings, the post office, and seventy-five private houses. Up to the date of the 1878 fire, Sangameshvar was the head-quarters of the sub-division, and had, in addition to the ordinary revenue and police offices, a subordinate judge's court and a post office. On the destruction of the public offices the head-quarters of the sub-division were moved to the more central and convenient village of Devrukh.

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Places of Interest.

REDI FORT, or
YASHVANTGAD.

ROCK TEMPLES.

SANGAMESHVAR.

Trade.

¹ Jour. B. B. As. Soc. V. 611. Mr. Burgess considers the Konkan caves the second in age of all the west India groups; the oldest are at Junagad in Káthiáwár.

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SANGAMESHVAR.

History.

Sangameshvar, the meeting of the Alaknanda and Varuna, is a place of some sanctity and of high antiquity. According to the Sahyādri Khand it was originally called Rāmakshetra and had temples built by Parashurām or Bhārgavrām. In later times, perhaps about the seventh century, a Chālukya king Karna, coming from Karavir or Kolhāpur, made Sangameshvar his headquarters, and founding a city, built a fortress, temples, and palaces.¹ Of the temples one, called Karneshvar after its founder, remains. Sangameshvar continued for some time the head-quarters of a Chālukya chief. It is mentioned in a Chālukya grant probably of the eleventh or twelfth century.² In the twelfth century it was for long the residence of Basav, the founder of the Lingāyat sect.³ In the sixteenth century it was the head-quarters of a Bijāpur governor. Barbosa (1514) speaks of it as Singucar, a town of much commerce and merchandise with many ships from divers ports.⁴ It was also, though this was probably at Jaygad at the river mouth, a great stronghold of pirates.⁵ In 1540 the Bijāpur governor, scheming to make himself independent, asked for, but was refused Portuguese help.⁶ In the seventeenth century (1670) it is spoken of as Zanguizara four leagues from Dābhol.⁷ Here, in 1689, Sambhāji the son of Shivāji was surprised during a drunken revel, and made a prisoner by Aurangzeb. Hamilton (1700-1720) calls it an excellent harbour, but adds that the country was frequented by Rabāris and was not inhabited.⁸ In 1819, numbers of Vanjāris in the dry season gave Sangameshvar the look of a place of some importance. But it was in no way a town and had only a very small fixed population.⁹

Temples.

Two miles up the river, in old Sangameshvar, called the *kasba*, to distinguish it from the new town, *peth*, are several interesting temples. The chief of them is the temple of Karneshvar already referred to whose shrine is said to date from as far back as Parashurām.¹⁰ Karna the Chālukya (634) is said to have built or repaired 360 temples and granted the revenues of many villages for their support. Every year on *Māgh Vadya* 30th (February - March)

¹ The date of this Karna, who seems to be the same as the founder of the Mahālakshmi temple at Kolhapur (Jour. B. B. Roy, As. Soc. XI. 100), has not yet been fixed. The style of building is supposed (Jour. B. B. Roy, As. Soc. XI. 107) to point to some time about the eighth century A.D. At the same time, according to some verses in the Kolhapur Mahālakshmi temple, Karna flourished about A.D. 100 (30 *Shalunihan*) (Jour. B. B. Roy, As. Soc. XI. 104), and according to the Sangameshvar Mahātmya he became king in 178 (S. 100). Jour. B. B. Roy, As. Soc. XI. 99.

² Jour. B. B. Roy, As. Soc. II. 263. ³ Wilson's Mackenzie Collection, II. 4, 10.

⁴ Stanley's Barbosa. The Portuguese writers notice its exports of pepper and iron. DeCoutto, XII. 30.

⁵ Dom Joao de Castro (1538), apparently from the pirates infesting its mouth, calls Sangameshvar the road of the Malabārs. Primeiro Roteiro da Costa da India, 39.

⁶ DeCoutto, IV. 352. ⁷ Ogilby's Atlas, V. 248. ⁸ New Account, I. 244.

⁹ Collector to Gov. 15th July 1819; Revenue Diaries 142 of 1819, 2577. Some details of the present state of the Sangameshvar river are given under "Jaygad".

¹⁰ Jour. B. B. Roy, As. Soc. XI. 100. According to Lieut. Dowell (1829) Karna repaired temples originally built by Parashurām. Mr. Dowell noticed that the chief temple was of the same age and style as the Kolhapur temple. There were then (1829) the remains of over a hundred ruined shrines. Bom. Rev. Rec. 225 of 1851, 273.

a fair is held attended by about 1000 persons. At the meeting of the rivers are several sacred places, *tirthās*, among them one known as the cleanser of sins, *dhuta pápa*.

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Places of Interest.

Sarjekot Fort. *See Málvan.*

SARJEKOT FORT.

Sa'tavli, a large village in the Rájápur sub-division with, in 1872, 1668 people, lies about twelve miles up the Muchkundi creek, surrounded though not shut in by high hills. Being the nearest point to the famous fort of Vishálgad the place has a small trade. It seems to be Dobetala to which Barbosa (1514) refers as having on its banks several small places, orchards, and betel gardens.¹ The Musalmáns, of whom there are many, say that its former great trade was spoilt by the silting of the creek. There are old paved roads and other Musalmán remains.² Close to the river is a small fort with six bastions and about a fifth of an acre in area. It has no garrison and no water, and the supply of provisions is very limited. In 1862 it was ruinous, and had only one old and unserviceable gun.³

SÁTAVLI.

Sidhgad Fort, on a hill about sixteen miles north-east of Málvan, has an area of about two and a half acres. It is a place of no importance. In 1818 (April-May), when attacked by Colonel Imlack it resisted; but with the help of a detachment of the 89th Regiment, a second attack succeeded.⁴

SIDHGAD FORT.

Sindhudurg Fort. *See Málvan.*

SINDHUDURG FORT.

Suma'rgad Fort, in Khed, on the same spur of hill as Mahipatgad a good deal lower and about four miles to the south of it, is about three-quarters of an acre in area.⁵ Surrounded by walls from fifteen to twenty-two feet high,⁶ and with four corner battlements, the fort cannot be entered without the help of ladders. In 1862 it was in a ruined state without a garrison and with no guns.⁷

SUMÁRGAD FORT.

Suvarndurg Fort. *See Harnai.*

SUVARNDURG FORT.

Uchitgad, or **Prachitgad**, one of the Sahyádri forts, stands on rising ground at Shringárpur in Sangameshvar between the Mala and south Tivra passes. It is between three and four acres in area and can be entered only by a ladder.⁸ It has no garrison and no water. Provisions can be got from a village some miles off. In 1862 it was very ruinous and had four unserviceable guns.⁹ It was taken by Colonel Prother in 1818 (January).¹⁰ The fort is also called Rángua.¹¹

UCHITGAD.

¹ Stanley's Edition, 73, 74.

² Gov. List of Civil Forts, 1862.

³ As. Journal, VI. 320; Nairne's Konkan, 115.

⁴ Mr. A. T. Crawford's MS.

⁵ Burgess' Provisional Lists of Architectural and Archaeological Remains, 34.

⁶ Gov. List of Civil Forts, 1862.

⁷ Clune's Itinerary, 149.

⁸ Nairne's Konkan, 33.

⁹ Gov. List of Civil Forts, 1862.

¹⁰ Gov. List of Civil Forts, 1862.

¹¹ Nairne's Konkan, 114.

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Places of Interest.

VÁGHOTAN.

Vághotan, in the Devgad sub-division, is a small village and port on the south bank of the Vijaydurg river about fifteen miles from the coast. The landing stage is joined with Vijaydurg by a cart road, and lies on the main route to the Deccan through the Phonda pass. Some thirty years ago, with stones taken from the Khárepátan fort,¹ quays, and a large district officers' and a travellers' bungalow were built. The houses are kept in repair, but the port has no trade. The river is navigable as far as Vághotan for vessels drawing seven feet of water.²

VELNESHVAR.

Velneshvar, a village in Chiplun on the coast about six miles north of the Shástri river mouth, with, in 1872, 1513 people, is known chiefly on account of a large yearly fair held on *Maha Shivrátá* (March). From ten to twelve thousand people attend, shops and booths are put up, and goods to the value of about £1200 (Rs. 12,000) are generally sold.

VENGURLA.

Vengurla, north latitude 15° 50' and east longitude 73° 41', the head-quarters of the Vengurla sub-division, with, in 1872, 14,996 people, lies 200 feet above the sea, about a mile east of the mouth of a swampy creek.³ The camp lies about a mile inland. Hilly and dry with tall jack, cashewnut, cocoanut, and mango trees, the country is very picturesque. A chain of low hills runs north-east to within 500 yards of the town, and outside of the camp stretches about nine miles south-west as far as Redi.

Port.

Except on the south, Vengurla bay is sheltered. When, which seldom happens, it blows fresh from the south, small coasting craft run before the wind eighteen miles north to Málvan.⁴ Overlooking the point and creek, 250 feet above sea level, is a white pyramid known as Vengurla Beacon. Close to this, in the fair season when the port is open, two fixed lights twenty feet apart are shown 250 feet above the sea, and visible for nine miles. From mid-June till the end of August, the port is closed.⁵

Population.

Of the total 1872 population of 14,996 souls, 13,970 were Hindus, 551 Christians, and 462 Muhammadans. Of the Hindus 2015 were Bráhmans including 1631 Shenvis, 762 Vánis, 3064 Maráthás, 558 Gávdás or Ágris, 44 Gavlis, 126 Bhátiás, 138 Nhávis, 246 Sonárs, 159 Sutárs, 1975 Gábits, 3916 Bhandáris, 94 Kolis, 294 Telis, 45 Parits, 27 Devlis, 35 Bhávis, 56 Vanjáris, 27 Jains, 68 Lingáyats, 173 Mhárs, and 92 Chámhbárs. Of the Muhammadans, 434 were classed as Shaikhs and 28 as Patháns.

Trade.

Ever since the British conquest, Vengurla has been a rising place. It owed its importance, in the first instance, to its nearness to the military cantonments of Belgaum and Dhárwár, with which it was formerly joined by a road crossing the Sahyádris at the Rám pass. The people are vigorous, enterprising and energetic, and

¹ Gov. List of Civil Forts, 1862.

² Taylor's Sailing Directory, 391.

³ Hydrographic Notice No. 17.

⁴ It is high water on full and change of the moon at eleven hours. Springs rise eight and neaps five feet. Taylor's Sailing Directory, 392.

⁵ Taylor's Sailing Directory, 392.

take much after the Bombay traders in their liberal and comprehensive views. The opening of the splendid cart road over the Párpoli pass and the erection of a light-house on the dangerous rocks outside of the port, have given a great impetus to Vengurla, which now among Konkan towns ranks next to, though far below, Bombay. Even in the fair season the port is at times most dangerous and in the south-west monsoon it is closed. In spite of this it monopolises the traffic with Belgaum and the neighbouring districts almost from Nipáni to Gokák.¹ All troops pass through Vengurla to and from the Southern Marátha districts. The average yearly value of the trade for the five years ending 1877-78 amounted to £727,369 (Rs. 72,73,690) of which £303,303 12s. (Rs. 30,33,086) were exports and £424,060 8s. (Rs. 42,40,604) imports. The chief articles that pass through the town from the Southern Marátha Country to Bombay are cotton, gallnuts, molasses, hemp, grain, pulse, clarified butter, groundnuts, country cloth, and in smaller quantities tobacco, turmeric, chillies, and spices. The local exports are cocoanuts, betelnuts, cashewnuts, oil of *kokam* *Garcinia purpurea*, plaited palm leaves, coir fibre, and salt. From Bombay come piece goods, metals, military stores, and miscellaneous foreign articles. As a rule no grain travels eastward. But during the 1877 famine, within seven months no less than 52,000 tons of grain, valued at £129,688 (Rs. 42,96,880) were received from Bombay and forwarded to the distressed districts. Except a few local firms of long standing conducted by. Sheuvis and Bhátiás, the trade is carried on between Bombay and Southern Marátha merchants, who employ forwarding agents, *daláls*, in Vengurla to receive and push on consignments by sea or land. Advices are sent by telegrams, and the sole duty of the agents is to arrange for freight and shipment to Bombay, or for land carriage to the Deccan. Bulk is seldom broken, and the goods coming in at one end of the town, pass out at the other within a very few days or hours. Supplies for local use are brought by petty Váni and Sheuvi dealers, and European stores are provided by Pársis.

Vengurla is connected with Belgaum by two routes, one of seventy-five miles by the new provincial road over the Párpoli pass, and the other a few miles shorter by the old Rám pass, from its steepness now used only by pack bullocks. A branch road from the Párpoli line, at Akeri eleven miles from Vengurla, connects Vengurla with Málvan, and also with the main road to Ratnágiri and the northern parts of the district.

There are no manufactures of any importance. The eight salt pans near the harbour which formerly yielded an average yearly outturn of 2222 tons (60,000 *mans*) have all been closed.

The town was made a municipality in 1875. The income from octroi duties, house tax, wheel tax, and miscellaneous items, amounted in 1877 to £1379 12s. (Rs. 13,796), and in 1878 rose to £1468 (Rs. 14,680). In 1879, from a reduction in octroi duties, it fell to

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VENGURLA.
Trade.

Communication.

Manufactures.

Management.

¹ Collector's 4430, 12th December 1877.

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VENGURLA.
Management.

£848 6s. (Rs. 8183). In four years the municipality, besides thoroughly lighting the town, maintaining an efficient conservancy establishment and making roads and streets, has carried to completion a scheme for supplying the most populous part of the town with water, and has erected handsome public markets. The water works constructed by Mr. A. T. Crawford, costing £1600 (Rs. 16,000), of which £1500 (Rs. 15,000) were subscribed by the townspeople, consisted in repairing and strengthening the dam of the old Náráyan reservoir, about three-quarters of a mile north-west of the market, and laying a six inch iron main from the pond to the town. The pond is fed by springs, and the water is passed through a filter into the distribution pipe. On the sides of the principal thoroughfares, standpipes and open cisterns regulated by ball cocks have been set up at convenient intervals. The market is a two-storied central building with a clock tower. The basement hall is divided into stalls for the sale of fruit, vegetables, and miscellaneous stores, and the upper story contains the municipal offices. Round three sides of the main building are ranged shops for general dealers in grain and groceries, while at the back and separated from the other buildings is the fish market. The markets are conveniently placed in the busiest part of the town, on the side of the main road leading to the Párpoli pass. The cost of the buildings was about £3020 (Rs. 30,200), and the present monthly rent realised from shops and stalls amounts to £12 10s. (Rs. 125). Further extension of the buildings and a separate quadrangle with shops for cloth sellers are needed, and will be carried out when funds admit.

At the landing stage, a stone quay and steps have at considerable expense been cut from the hill side. Below the headland and beacon at the north of the harbour, are the custom office and a small dwelling built by the salt department. A mile or so inland, at the meeting of the roads to the Párpoli and Rám passes, and surrounded by houses is the travellers' bungalow. Half a mile along the upper, or Páropli road, where stand the main market and the chief shops and warehouses, is the municipal market, a conspicuous white painted red building, with a square clock tower and gable roof. Between the travellers' bungalow and the markets, and to the north of the road is the telegraph office. On the lower, or Rám road, are the offices of the mámlatdár and chief constable, and the court of the subordinate judge. To the south of this road and near the travellers' bungalow is the old factory or fort now used for commissariat stores and for the temporary accommodation of troops travelling to and from Belgaum. About two miles from the travellers' bungalow, by the side of the Rám pass road, is the camp, a fine open plain on which are built the civil hospital and a few houses for European residents and visitors. Here also is the camping ground for regiments on the march to and from Belgaum.

Education.

There are two vernacular schools for boys and one for girls, and a native library.

History.

In 1638, under the name Fingerla, Vengurla is mentioned as a very convenient haven, where the Dutch had a trade settlement and

victualled their ships during their eight months' blockade of Goa.¹ In 1660, under the name Mingrela, it is mentioned as a large town stretching half a league along the coast, with one of the best roads in India, where all the vessels that came from Batavia, Japan, Bengal and Ceylon, and those bound for Surat, Ormuz, Bassora and the Red Sea, both coming and going, anchored, because both the water and rice were excellent. It was famous also for its best of spices cardamoms, which not being had in other countries, were very scarce and dear; also for its great store of coarse calicuts spent in the country, and great quantities of coarse matting that served for packing goods.² About this time Shiváji placed a garrison in the town and a few years later (1664), in punishment of a revolt burnt it to the ground.³ In the next year (1675) it was burnt by the Moghals, the Dutch defending themselves.⁴ In 1683 Aurangzeb's rebel son Akbar, meaning to leave India for Persia, took refuge in the Dutch factory,⁵ and in the next year Sultán Muazzam, to punish it for its support of his brother, sacked the town with fury, the Dutch defending their factory from the windows till they bought off the attack.⁶ In 1696, off Vengurla, seven Dutch and five French ships had an indecisive fight. At this time it is described as once a place of trade, where the Dutch had a factory for cloth, both fine and coarse. In 1696 Khem Sávant of Sávantvádi⁷ overran the country, and under pretence of visiting the Dutch chief, seized and plundered their factory. While held by Khem Sávant, Vengurla is said to have been attacked and plundered by Angria.⁸ In 1750 it was the head of 116 villages and yielded a yearly revenue of £2091 12s. (Rs. 20,916).⁹ In 1766 the Sávantvádi chief mortgaged its revenue for thirteen years to the Bombay Government to raise the sum of £20,000 (Rs. 2,00,000) wanted to free Redi, the English promising to establish a small factory with the British flag and a few sepoy to guard it.¹⁰ This factory was, in 1772, mentioned as collecting a small revenue.¹¹ At the end of the thirteen years (1779) the Sávants had failed to carry out some of the stipulations of the treaty and the English refused to give up Vengurla, but it was taken and plundered by the Sávants.¹² In 1800 Lieutenant Hayes appeared before Vengurla, landed his men, and taking the chief battery, dismantled it, threw the guns into the sea, and forced the pirate chief to give up all British property.¹³ In 1812 Vengurla was finally ceded by the Ráui of Sávantvádi,¹⁴ and has since remained in British hands.¹⁵

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VENGURLA.
History.

¹ Mandelslo in Harris, II. 360. Before 1641 the Dutch had a fortified factory. Stavorinus, III. 107. Baldeus (about 1660) says the Hollanders have a stately factory at Vengurla a place very considerable, not only for its plenty of wheat, rice, and all sorts of provisions, but also for its situation near Goa. Churchill, III. 602.

² Tavernier in Harris, II. 360.

³ Grant Duff, I. 200.

⁴ Orme's Hist. Frag. 53. In 1670 it was said to be the chief storehouse of the Netherlands East India Company. Ogilby, V. 253.

⁵ Orme's Hist. Frag. 125.

⁶ Orme's Hist. Frag. 133; Baldeus in Churchill, III. 152.

⁷ Hamilton calls him Kempason.

⁸ Hamilton's New Account, I. 248. Khem Sávant is described as a soldier of fortune fighting for the chief who pays him best, with 7000 or 8000 men and two pirate grabs.

⁹ Tieffenthaler. Res. Hist. et Geog. I. 506.

¹⁰ Grant Duff, III. 100.

¹¹ Forbes' Oriental Memoirs, I. 293.

¹² Nairne's Konkan, 104.

¹³ Low's Indian Navy, I. 204.

¹⁴ Hamilton's Des. of Hindustán, II. 221.

¹⁵ In 1826 it had 770 houses, 30 shops, a good landing place and a fort 180 feet square. Clune's Itinerary, 73

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VENGURLA.
History.

The fort or factory at Vengurla stands behind the swamp. It is a strong building slightly fortified, entirely European, and in appearance more Portuguese than Dutch.¹ In 1862 it was in good order, garrisoned by a detachment, and with five small guns. Water was abundant, and it was used by the military department as an arsenal and storehouse.²

Nine miles west-north-west of Vengurla lie the Vengurla rocks or Burnt Islands, a group of rocky islets stretching about three miles from north to south and one mile from east to west. The passage between the rocks and the mainland, about $2\frac{3}{4}$ miles from the shore, though deep, is dangerous from sunken rocks. Of the islands the highest is about 180 feet. On the outermost of the three larger rocks is a light-house with a white fixed light 110 feet high seen for fifteen miles.³ The three larger rocks are entirely metamorphic, and are composed of numerous varieties of quartzo-micaceous rocks mostly more or less ferruginous, and in many places a good deal decomposed and broken up. The rocks are quite bare, but the crevices everywhere and some few smooth places near their summits are filled and covered with quantities of a coarse tangled jointed grass. The largest of the three is pierced from side to side by a huge tunnel-like cave, and about the middle of the island, owing to the falling in of the roof, a shaft has broken down into the cave. Even in the fair season the landing is difficult. During the stormy months it is rarely practicable.⁴

Rocks.

These rocks are probably Ptolemy's (150) Heptanesia and the Sesikreienai of the Periplus (247).⁵ In 1540, Dom João de Castro under the name of Ilheos Queimados, or Burnt Islands, describes them as many in number, but ten of them specially large, five at sea and five close to the land. They were called burnt islands because they were of bare rock without water or vegetation.⁶ In 1788 they were held by the piratical tribe of Málvans.⁷

VETALGAD FORT.

Veta'lgad Fort, on a hill in Pendur village in the Varád petty division of Málvan, has an area of about twenty-two acres. In 1862 the walls were in bad order and there was no garrison. Water and supplies were abundant.⁸

VIJAYDURG OR
GHERIA.

Vijaydurg (Fort Victory), or **Gheria** (the Enclosure), north latitude $16^{\circ} 32'$ and east longitude $73^{\circ} 22'$, a port in the Devgad sub-division, with, in 1872, 2331 people, lies on the south shore of the entrance to the Vághotan river, 170 miles south of Bombay. One of the best harbours on the western coast, and without any bar, it may be entered in all weathers, and even for large ships is a safe south-west monsoon shelter. In the fine season vessels may anchor

¹ Taylor's Sailing Directory, 391.

² Gov. List of Civil Forts, 1862.

³ The stone and cement used in building this light-house were taken from the Sindhudurg fort. Nairne's MS.

⁴ Mr. A. O. Hume, Stray Feathers, IV. 418-420.

⁵ McCrindle's Periplus, 129, 130; Vincent's Commerce of the Ancients, II. 433.

⁶ Primeiro Roteiro da Costa da India, 17.

⁷ Rennel's Memoir of a Map of Hindustan, 31.

⁸ Gov. List of Civil Forts, 1862.

anywhere in the harbour, the best position being a mud and clay bottom with three and a half fathoms at low water. Between Vijaydurg fort and the fortified cliffs to the north-east, the channel is six cables wide, with, at low water, depths of from twenty to twenty-four feet. Inside it rapidly shoals, and two and a half cables further the low water depth is not more than twelve or thirteen feet. The deep channel, only one and a half cables broad, lies close to the left bank of the western shore, and except at high water spring tides, there is not room for large vessels to swing.¹ The village, small and poorly built, with little tillage and no industry but fishing, is connected with Vághotan fifteen miles distant, and through the Phonda pass with the Deccan by a good but little used road.²

The population consists mainly of Muhammadans by whom most of the trade is carried on. There are in addition a few Bráhmans, Bhandáris and other Hindus, and a small colony of native Christians, some of them Abyssinians, who have built a small chapel.

A little traffic passes between Bombay and the Deccan by the Phonda route. The average yearly trade, during the five years ending 1877-78, was valued at £50,643 6s. (Rs. 5,06,433) of which £21,565 16s. (Rs. 2,15,658) represented exports and £29,077 10s. (Rs. 2,90,775) imports. During the 1857 mutinies, troops, guns, and treasure were, in the stormy season, forwarded by this route to the Deccan and Southern Marátha Districts. During the 1877 famine, the Vághotan road, originally made by the villagers, was out of repair and not open for cart traffic. In spite of this about 1000 tons of grain passed from Bombay through Vijaydurg to the Deccan. In the same year about seven and a half miles of the road were re-made as a famine relief work, and the rest has since been finished out of local funds. Coasting steamers call three times a week at Jaytápúr at the mouth of the creek six miles off.

The local carpenters make much admired bison-horn ornaments of various kinds. But the industry is very small and the craftsmen much indebted.

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VIJAYDURG OF
GHERIA.

Trade.

Manufactures.

¹ It is high water on full and change of the moon at eleven hours, mean springs rise nine feet and neaps five feet. Taylor's Sailing Directory, 390.

² By the early Europeans Vijaydurg, called Khárepátan from the town of that name twenty-five miles from its mouth, was thought one of the best of the Konkan ports. Dom João de Castro (Prim. Rot. da Costa da Índia, 30) calls it (1538) the noblest and most favourite river in west India. The only big river without bar, or rocks, or other dangerous troubles. To enter wanted no skill, for whether you went by the middle or the side you always met with a kindly welcome and a good depth to anchor. About a century later (1660), Tavernier (Harris' Voyages, II. 360) calls it the best port in Bijápúr with fourteen or fifteen fathoms of water near the land. Ogilby, 1670 (Atlas, V. 246) also mentions it as one of the best Konkan ports. After it was Angria's capital, A. Hamilton (1710) mentions it as Gheria or Vizendruk, fortified by a strong castle washed by the sea (New Account, I. 246). In 1756 Sir W. James, by a strong castle washed by the sea (New Account, I. 246). In 1756 Sir W. James, surveying before the English attack, speaks of a 'very large' town betwixt a large fort and a hill to the south. The town seems to have been nothing but a large collection of palm leaf huts. Low's Indian Navy, I. 133. Its great natural advantages make it probable that the mouth of Vághotan river is one of the oldest coast settlements. There seems reason to suppose that it is Ptolemy's (150) Byzantium, a Greek corruption of Vijayanta. See Weber in Ind. Ant. II. 148. Rashid-ud-din's (1310) Karoba has been thought to be Gheria. Yule in Ind. Ant. III. 209.

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VIJAYDURG or
GHERIA.

Fort.

The village has a sea custom office, a post office, and a vernacular school. In the fort are two buildings for the use of travellers, and a large government shed made as a grain depôt during the 1877 famine.

Never a place of much trade or wealth, the whole interest of the village centres in its fort.¹ On the neck of rocky land that forms the south side of the bay, Vijaydurg, one of the best and most Muhammadan of Konkan fortresses, though not very striking from the sea side, rises grandly about 100 feet above the river. The walls, of very great strength and protected by twenty-seven bastions, rise, at their highest point, into a great round tower. On the west breached in several places by the sea, they are over their whole length loosened and ruined by trees and creepers. Their triple line of fortifications encloses about twenty acres,² overrun with bushes, but with some good wells and several large habitable buildings.³ The fort is probably old, enlarged under the Bijápúr kings, and about the middle of the seventeenth century, much strengthened by Shiváji⁴ to whom it owes its finest features, the triple line of walls, the numerous towers, and the massive interior buildings.⁵ About forty years later (1698), the pirate chief Angria made it the capital of a territory stretching for about 150 miles along the coast and from thirty to sixty miles inland. For more than fifty years, Angria's pirates were a terror to all traders, and the English were forced to keep a special fleet to act against them. In April 1717 their ships of war, carrying a considerable body of troops, sailed against Gheria. An attempt to breach the wall failed, the storming party was driven back with great loss, and the fleet forced to withdraw. Three years later a joint Portuguese and English fleet under Mr. Walter Brown destroyed sixteen of Angria's vessels, but made no impression on the fort.⁶ In the same year (April 1720) the English ship *Charlotte* was attacked, and after a gallant defence, her powder having run down, she was caught and taken into Gheria.⁷ In 1724 a Dutch fleet from Batavia attacked the place, but with no better success.⁸ In 1736 Angria's vessels took the richly laden English East Indiaman *Derby*, the armed ship *Restoration* of twenty guns, and several other vessels of less note. In 1738, in an action between Angria's fleet and Commodore Bagwell, Angria's fleet fled up the Rájápúr creek and escaped with little loss.⁹ Besides several captures from

¹ The special interest of Vijaydurg is that its old Musalmán buildings are less than in most forts, hidden under Marátha additions. Nairne's Konkan, 38. There is also a mosque and the tomb of a Musalmán saint, the first in the centre of the fortress very near the flag-staff. Nairne in Ind. Ant. III. 320.

² Gov. List of Civil Ports, 1862.

³ Bombay Government Gazette, 3rd July 1879, 699. In 1862, except a part of the first and third outer walls, the fort was in good repair. Water was abundant and supplies easily obtained. There were 275 old unserviceable guns. Gov. List of Civil Ports, 1862.

⁴ Grant Duff, 85; Nairne's Konkan, 63.

⁵ Nairne in Ind. Ant. III. 320.

⁶ Low's Indian Navy, I. 100; Nairne's Konkan, 80.

⁷ Low's Indian Navy, I. 100.

⁸ Grant Duff, 231. There is said to have been another Dutch attack in 1735.

⁹ Low's Indian Navy, I. 107. According to another account (Bom. Quar. Rev. IV. 75) some of the Commodore's broadsides reached the enemy, causing much damage and killing the admiral.

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VIJAYDURG OR
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the Dutch, Ángria about this time took the French forty-gun ship Jupiter, with 400 slaves. In 1749, Mr., afterwards Sir William, James was attacked by Ángria's fleet, and after a hard fight, drove them to Gheria, pursuing them and causing great loss.¹ Next year, in spite of their defeat, they were bold enough to attack Commodore Lisle in command of a fleet of several vessels, among them the Vigilant of sixty-four and the Ruby of fifty guns.² Again, in February 1754, attacking three Dutch ships of fifty, thirty-six, and eighteen guns, they burnt the two large ones and took the third. Elated with this success, Ángria built several vessels, set two large ships on the stocks, and boasted he should soon be master of the Indian seas. For long the Peshwa and the Bombay Government planned Ángria's ruin. At last, in 1755 it was settled that in the next fair season the Peshwa's troops should attack him from land and the British by sea. At the close of the year (1855, Dec. 22) Commodore James was sent to survey Gheria fort, then thought as strong as Gibraltar. He found that ships could get within point-blank shot; that on shore guns could be carried, and a diversion made from the tops of two hills; and that the fort was crowded with unprotected buildings. The place was surprisingly unlike what he had heard.³ The Bombay Government were fortunate in having in their harbour a Royal squadron under Admiral Watson and a strong detachment of troops under Lieutenant-Colonel, afterwards Lord, Clive. On the 7th April 1756, the fleet of twelve men-of-war, six of the Royal and six of the Company's navy, with 800 European and 600 native troops, and five bomb vessels with a company of artillery, and four Marátha grabs and forty gallivats, sailed from Bombay.⁴ Sending a few vessels ahead to block the harbour, the fleet arrived off Gheria on the eleventh. The Marátha land force, for some time a-field, was camped against Gheria. Terrified by the strength of the British fleet, Tuláji Ángria, leaving the fort in his brother's charge, surrendered to the Marátha general. Hearing that the Marátha general had extorted from Tuláji an order for the delivery of the fortress, Admiral Watson on the next morning (12th) summoned the fort to surrender. Getting no answer, the fleet, with the afternoon sea breeze, forming two divisions, sailed each in line of battle ship covering a bomb ketch, and protecting the column of smaller vessels from the enemy's fire. They passed the point into the river, and under a heavy fire, anchoring fifty yards off the north fortifications, battered them from 150 pieces of cannon. Ángria's ships were drawn up under the fort, all fastened together,

¹ Low's Indian Navy, I. 127.

² Milburn's Oriental Commerce, I. 296.

³ I assure you, Sir, it is not to be called high, nor, in my opinion, strong. It is indeed a large mass of buildings, and I believe the walls may be thick. But that part of the works which fell under my observation and which was three-quarters of their circumference is quite irregular, with round towers and long curtains in the eastern manner, and which discovered only thirty-two embrasures below and fifteen above. Commodore James, 21st Decr. 1755; Ives' Voyages, 80.

⁴ The details were: Royal squadron, one 70 guns, one 66 guns, one 60 guns, one 50 guns, one 20 guns, and one 16 guns; Company's squadron, one 44 guns, four 28 guns, and one 16 guns. Of the native troops 300 were Portuguese and 300 sepoys. Low's Indian Navy, I. 134. These details differ slightly from those given by Orme. Hist. Frag. 408-417 in Narne's Konkan, 92.

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Places of Interest.

VIJAYDURG OR
GHERIA.

and a shell setting one on fire, the whole were burnt.¹ Another shell set fire to the buildings in the fort, and the tremendous cannonade silenced the fort guns.² Still the commander held out. Learning that the fort was to be handed over to the Maráthás, Colonel Clive landed and held the ground between the Peshwa's army and the fort. Next morning the admiral again summoned the fort to surrender. The commandant asked for time to consult his brother. A respite was granted, till, in the afternoon, as no answer came, the bombardment was re-opened. By five o'clock the garrison surrendered, and Colonel Clive, marching in, took possession.³ Though the masonry was destroyed the rock defences were so perfect, that a determined garrison need not have yielded to any sea attack. Fifteen hundred prisoners were taken; eight Englishmen⁴ and three Dutchmen were rescued; and plunder, amounting besides stores to £125,000 (Rs. 12,50,000), was divided among the captors.⁵ The ruin of Angria's navy was completed by the destruction of two sixty-gun ships on the stocks. Four of the

¹ One ship of 74 guns, eight grabs of from 20 to 30 guns, and sixty gallivats. Low's Indian Navy, I. 136. Of Angria's ships Dr. Ives (1753) writes: 'They are not unlike the *Tortons* of the Mediterranean, only a great deal lower; they carry two guns in the bow and vast numbers of men. Their music is a plain brass tube, shaped like a trumpet at both ends and about ten feet long, and a drum called a *tom tom*, a skin stretched on a large shallow brass pan, on which they strike with two large sticks and make an amazing noise. Among them are two ketches which they call *grabs*.' (Ives' Voyages, 43). Several of the gallivats had blue or green or white pendants like the Portuguese at their mast heads, and one had a white flag with a red cross in the middle. (Ditto, 80).

² According to another account the same fire which burnt the ships passed to a large vessel lying on the shore, and from her to several smaller craft that were building. From the building yard it was conveyed to the arsenal, storehouse, suburbs and city, and even to several parts of the fort, particularly to a square tower where it continued burning all the night with such violence that the stone walls appeared like red hot iron. Ives' Voyages, 85.

³ According to Dr. Ives (Voyages, 85), Colonel Clive making his approaches from land greatly annoyed the enemy. At a quarter after five he came to the Admiral's ship bringing an officer from the fort with the articles of capitulation, which being agreed to by himself and the two Admirals, an English officer was sent in to take possession of the fort and to hoist English colours. Captains Forbes and Buchanan were, next, with sixty men, detached to see the garrison lay down their arms, and on the 14th at sunrise the Colonel and the whole army marched into the place.

⁴ Ives (Voyages, 88) gives the names of ten Englishmen.

⁵ Milburn's Or. Com. I. 296. In Gheria were found 250 cannon, six brass mortars, an immense quantity of stores and ammunition, £10,000 in silver rupees, and £30,000 in valuable effects (Ives' Voyages, 86). According to Dr. Ives (Voyages, 81-82), a council of sea and land officers, held before setting out on the expedition, had, to avoid disputes, settled that Admiral Watson as commander-in-chief of the King's squadron should have two-thirds of one-eighth of the spoil, and Rear-Admiral Pocock one-third of one-eighth, while Lieut.-Colonel Clive and Major Chambers were to share equally with the captains of the King's ships. The captains of the Company's ships and captains of the army were to share equally with lieutenants of men-of-war and subaltern officers of the army, and lieutenants of the Company's ships with warrant officers of the navy. Afterwards the officers of the army, not liking that their Commander-in-Chief should share with captains of men-of-war, the Admiral to satisfy them gave his own security to make Colonel Clive's portion equal that of Admiral Pocock, making good the deficiency out of any moneys he himself might be entitled to. In this way, after Gheria fell, a sum of about £1000 was found due to Colonel Clive from Admiral Watson. This Admiral Watson sent with his compliments, but Colonel Clive was generous enough to refuse it, saying that he would not deprive the Admiral of the contents of his private purse, and that he had appeared to accept of the terms only for the good of the service.

Company's vessels and a detachment of 600 European and native troops were left to guard the harbour and fort.¹

The Bombay Government were very anxious to keep Gheria, and offered to give Bānkot in exchange. To this the Peshwa would not agree, and Gheria was handed over in the following October.² The Peshwa made it the head-quarters of a district and the seat of his Admiral Anandrāv Dhulap, whose descendants are still settled at Vijaydurg. Under the Peshwa piracy flourished as vigorously as ever. In 1780 Anandrāv attacked and captured an English ship carrying despatches to the Court of Directors, and imprisoned an officer in Rasālgad near Mahābaleshvar. Again in April 1782, in spite of a gallant resistance, he captured the Ranger a ship of the Bombay Marine.³ In 1800 Lieutenant Hayes was sent to harass the pirates, but though he punished them severely, they were soon as troublesome as ever. In May 1818 Colonel Imlack, attempting to take Vijaydurg, was met by so heavy a fire, that his ships were forced to cut their cables and run. But the whole of the district had now passed to the British, and in June of the same year the commandants, two brothers of the Dhulap family, surrendered. In the river was taken the Admiral's ship, 156 feet long 33 beam and 130 tons burden.⁴

Two miles from the fort, on the same side of the river, is an old dock, hollowed out of the rock by Āngria, 355 feet long and 227 in the broadest part, and said to have been able to hold vessels of 500 tons.⁵ Though nearly choked with mud the stone face and entrance may still be seen. There was also a small building yard and a mast house.⁶ On the creek two miles below the dock is (1862) a strong well built Martello tower called the *Mitātya Buruj*. A little way from the fort, on the Vāghotan road, is the temple of Rāmeshvar, probably 100 years old, built by Gangādhar Banu, a brother of Nāna Fadnis (1720-1800). An ordinary temple with a large rest-house lying deep in a glen, its chief interest is the approach about 250 yards long, cut through rock fifty feet deep. The idol, a four-armed figure seated on a bull, is of solid silver said to weigh a hundredweight.

Vijaygad. There is a second Vijaygad fort on the north bank of the Shāstri, about two miles across the river from Jaygad.⁷ A

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VIJAYGAD.

¹ Tulāji Āngria remained till his death a prisoner first in a fort, according to one account, near Rāygad in Kolāba, according to another in Vandannear Sātāra (Grant Duff, I. 66), and afterwards in Sholāpur. Low's Indian Navy, I. 136. Grant Duff, I. 66. His tomb and those of his six wives, one of them a *sati*, are shown at Vijaydurg. Nairne's Konkan, 95.

² Low's Indian Navy, I. 136.

³ Grant Duff, 457 in Nairne's Konkan, 105.

⁴ Waddington's Report in Asiatic Journal, IX. 123. On their surrender the Dhulap family were, by the Bombay Government, given two villages near Vijaydurg. Here they are still settled, and though impoverished by mortgages, hold an honourable place among Marāthās, their daughters being tit matches for the highest families. Nairne's Konkan, 105.

⁵ Waddington's Report in Asiatic Journal, IX. 123.

⁶ In 1819 the bottom of the dock, sloping gently upwards from the entrance, was thick with mud and sand. The gateway 23 feet broad below and 37 above, stood open without gates. Of the walls parts on the south and east were cut in the rock; the rest was of masonry in good repair. From the south-east corner ran a stone-built water channel. Lieut. B. Dominicette, 9th June 1819; Public Diaries 432 of 1819, 1055.

⁷ See above, p. 341

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**YASHVANTGAD
 FORT.**

small fort, about a quarter of an acre in area, it is surrounded on three sides by a ditch. In 1862 the walls were ruinous and it had only one entire gun. There was no garrison and no water. Supplies could be obtained from neighbouring villages.¹

Yashvantgad Fort, on the north entrance of the Rájápur creek, with the sea on the south and a ditch to the north and west, has an area of about seven acres. In 1862, the walls and gates with their seventeen bastions needed repair. There was no garrison, and only twenty-eight old unserviceable guns.² The supply of water and provisions was abundant.

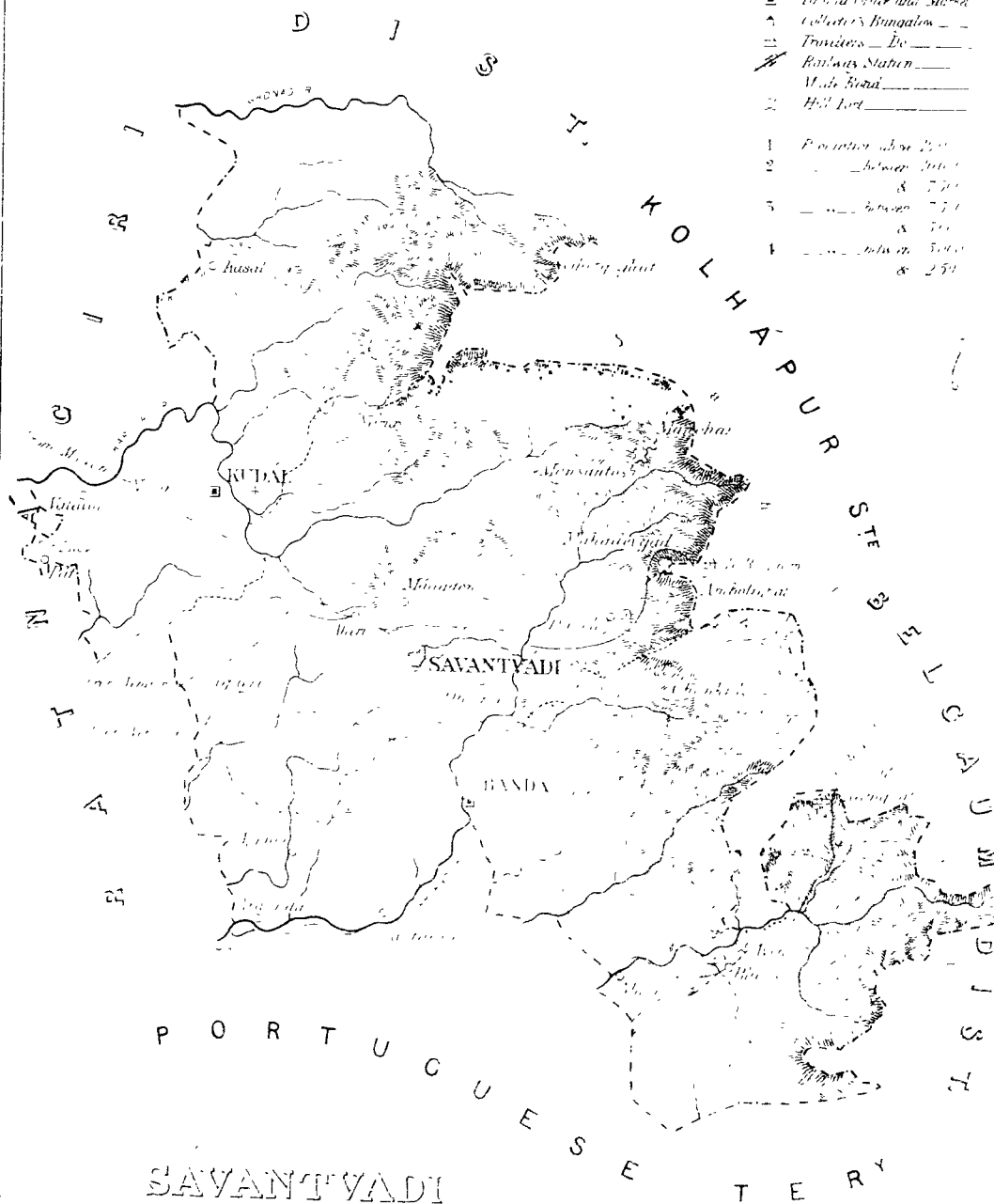
¹ Gov. List of Civil Forts, 1862.

² Gov. List of Civil Forts, 1862.

SÁVANTVÁDI.

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 - ✕ Railway Station
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SÁVANTVÁDI.

CHAPTER I.

DESCRIPTION.

THE state of **Sa'vantva'di**, lying between 16° 15' 30" and 15° 36' 33" north latitude and 74° 20' 51" and 73° 36' 11" east longitude, has a total area of about 900 square miles, a population, in 1872, of 190,814 souls or 212·02 to the square mile, and in 1879-80, a total revenue of £28,311 (Rs. 2,83,110).

Bounded on the north by the Málvan sub-division of Ratnágiri, it is separated by the line of the Sahyádris hills, on the north-east from the lands of Kolhápúr, and on the east and south-east from the Belgaum and Bidi sub-divisions of the British district of Belgaum. To the south lie the Dicholi and Pedna sub-divisions of the Portuguese territory of Goa, and on the west and north-west the Ratnágiri sub-divisions of Vengurla and Málvan.

For administrative purposes the lands of the state are distributed among the three sub-divisions, or *petás*, of Vádi, Kudál, and Bánda, each including several petty divisions, *tarafs*. The sub-divisions have on an average an area of about 300 square miles, containing the lands of seventy-five villages with a population of over 63,000 souls. The following summary gives their chief available statistics :

Sávantvádi Sub-divisions.

NAME.	Area.	Villages.	Population, 1872.	Revenue 1879-80.
Kudál	About 900 square miles.	60	67,007	£ 10,245
Vádi		64	73,397	10,981
Bánda		101	50,410	7085

Sávantvádi, about fifty miles long and from ten to thirty broad, is a compact territory unbroken by the lands of other states or districts. Cut off from the sea by a narrow strip of Goa and Ratnágiri, it stretches along the foot of the Sahyádris, a land of hills and streams, broken, rugged, and picturesque. As the land rises rapidly from the coast its river mouths and backwaters are navigable only for a very short distance. A few miles from the sea, the land becomes wooded and uneven, rising into hills that gradually grow higher and bolder till they merge into the Sahyádris range. The open country to the west, and the valleys that run eastward among the hills, are rich well-wooded rice lands, with, along the banks of rivers and at the foots of hills, groves of cocoa and betelnut palms. The lower hill slopes, though in many places

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Sub-divisions.

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Chapter I.**Description.****Aspect.**

cleared for tillage, have poor soil and grow only the coarser hill grains. Near the Sahyádris the country is strikingly beautiful. Spurs from the main hills, detached groups and isolated peaks with bold and varied outline, rising from 300 to 3000 feet above the plain, form strong natural fastnesses, some of them, as Manohar and Mansantosh, forts famous in history. Besides Manohar and Mansantosh the chief peaks and forts are Mahádevgad on the Ámboli pass about ten miles east of Vádi, Prasiddhgdar or Ránga about twenty-one miles north of Vádi, Kupicha Dongar near Válaal, and in the west the isolated hill of Vágneri. There are seven chief passes within Sávantvádi limits, two of them, the Ámboli and the Rám fit for carts, and five, the Ghotga, Ránga, Hanmant, Talkat, and Mángeli, fit only for foot passengers and pack cattle. Of the chief passes the Ámboli pass, about fourteen miles east of Sávantvádi, has a cart road. It is close to, and nearly on the same line as, the old Párpoli pass. The Rám pass, about thirty miles east of Bándá, formerly the main highway for carts, has, since the opening of the new Ámboli road, lost much of its traffic.

Rivers.

None of them of any considerable size, the Sávantvádi rivers, rising from the western Sahyádris slopes and passing west to the sea, have much sameness of character. At first mountain torrents dashing over wild rocky beds down steep hill sides, as they pass into the plains they flow with gentle current between sloping and open banks, till the largest of them, about ten miles from the sea, end in tidal navigable creeks. Of these streams the two chief, the Sarambal or Karli on the north and the Terekhol on the south, rise on either side of the Manohar hills and flow to the sea, the Karli with a westerly and the Terekhol with a southerly course.

The Karli.

THE KARLI, OR SARAMBAL, rising at the village of Shivápur on the Sahyádris hills to the north of Manohar fort, after a south-westerly course of about thirty-five miles, falls into the sea at Málvan. At the village of Pánvas and Pandur, about nineteen miles from its source, the Sarambal is, from the right, joined by the Bel and Háteri. Three miles further, near the village of Ánáv, the other branch, also from the right bank, after a south-westerly course of about ten miles, joins the main stream. For the remaining fourteen miles below Ánáv, the river is tidal and navigable for craft of about $1\frac{1}{2}$ tons (100 *mans*) burden. It is known as the Karli only for four or five miles from the sea. In its bed are several small islands, one or two in British territory between Nerur and Válaal, and one near the village of Sarambal. During the rainy season the Karli is nowhere fordable. There are ferries at Nerur, Sarambal, Válaal, Chendvan, and Karthi.

The Terekhol.

THE TEREKHOL, also called the BÁNDÁ RIVER, rises in the Sahyádris to the south of Manohar fort, and flows south-west by the villages of Sàngeli, Vatvana, Insuli, Bándá, Kás, Sátosa, Káthani, and Áraunda. As far as Bándá, or about fifteen miles from the sea, it is tidal and navigable for boats of about $1\frac{1}{2}$ tons (100 *mans*) burden. Larger craft cannot pass further than Áraunda about three miles from its mouth. The Terekhol has no important tributaries, but is joined by many mountain streams and rivulets, and during the

rainy season it becomes a very formidable river. For the rest of the year it is in many places fordable at low tide, chiefly at Bándá, Pangyár, Kanki, Bháip, Náik, Kájra, and Jhagadkhol. In the bed of the Terekhol near Kinla, about nine miles below Bándá, an island of about 100 acres, occupied for about 200 years, contains a few huts and cocoanut trees. Near Áraunda are four smaller islands, Dhonk, Karambal, Jagad, and Náráyandurg.

Besides the Karli and Terekhol there are four leading streams, the Gadnadi in the north, the Talavda in the centre, and the Tilári and Kalna in the south. Rising near the Ghotga pass, the GADNADI separates the sub-divisions of Kalsuli and Bordava from Málvan in Ratnágiri, and empties itself into the sea four miles north of Málvan. The TALAVDA rises at Vajrá, passes Hodavda, Talavda, Tulas, and Máton, and falls into the sea at Mochemád in Vengurla. The TILÁRI, also called the KUDÁSI, rises at the Rám pass, twice crosses the great Imperial military road from Belgaum to Vengurla, and enters Goa territory at Maneri. The KALNA takes its rise at the Talkat pass close to the Rám pass, crosses the road at Kalna, and passes into Goa territory. There are a number of other small streams, which in the rainy season, owing to the heavy rainfall and the nearness of the Sahyádris, suddenly swell into considerable rivers most difficult and dangerous to cross. So sudden are these freshes that during the five years ending 1878, thirty-three persons have on an average lost their lives by drowning.¹

Vádi, with no natural lakes, has thirty-eight reservoirs, seven in the Vádi division, nine in Bándá, and twenty-two in Kudál. Of these the largest, the Pearl Lake, *Moti Taláv*, at Sávantvádi, with an area of about thirty-one acres and a mean depth of about six feet, is fed by many natural springs, and receives the drainage of about 550 acres of hill land. In 1871, in consequence of the leaky state of the retaining wall, the old dam of dry rubble masonry was removed, and in its place, at a cost of about £2000 (Rs. 20,000), a wall about 204 yards long was built of cut stone masonry secured with hydraulic cement, and furnished at each end with iron sluice gates worked by rack and pinion, controlling the outlet of the lake. Since this wall has been completed, instead of being dry in April, a large body of water remains throughout the year. On the north-west side a long flight of steps leads to the water. The lake is used for washing and bathing and for watering cattle, and to the south-east and south-west, for irrigating rice fields. Of the other reservoirs, all much smaller than the Vádi lake, the largest and best are those at Mángaon, Bámbar, Jháráp, and Máton in Vádi; at Áraunda, Talavna, and Kinla in Bándá; and at Nerur, Válavál, Sarmbal, Pát, and Chendvan in Kudál. The Áraunda lake is said to have been built in 1761 by Raghurám Pághé, a Gwálor noble, and the pond at Talavna, by the wife of a Rája of a dynasty older than the Bhonsles (1575). On the November-December (*Márgashíra*) full moon, when a small fair is held, the Kinla pond is

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Rivers. *The Terekhol.*

Lakes.

¹ The details are, 1874, thirty; 1875, thirty-one; 1876, twenty-one; 1877, thirty-nine; and 1878, forty-five.

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Geology.

said, at the sound of the drum, to rise and overflow, and on the next day to fall to its former level. This rise is probably due to a specially high tide in the Terekhol which flows close by.

The succession of geological formations in Sávantvádi¹ may be conveniently tabulated in descending order as follows:

Post Tertiary or { 6. Sub-aërial formations and soils.
Recent. { 5. Alluvial deposits.

Tertiary ... 4. Konkan laterite.

Upper Secondary. 3. Deccan trap and iron-clay (laterite).

Azoic ... { 2. Kaládgi (Kadapa) series.
... { 1. Gneissic (metamorphic) series, with granitic and trappean intrusions.

These formations are best described in ascending order, as with the exception of the volcanic rocks of the Deccan trap series, the later sedimentary rocks mainly consist of the debris of the older ones. Of the formations named above, the gneissic series holds by far the greatest area, chiefly in the centre of the state. The rocks of the Kaládgi series the scanty ruins of a once widespread formation, cover but a very small surface. The Deccan trap on the east and the Konkan laterite on the west cover about equal areas. The alluvial deposits, of small extent and little geological interest, form the small flats along the lower courses of the larger streams.

Gneissic Series.

The members of the Gneissic or Metamorphic Series, so largely and typically developed in southern India, occupy, as already stated, the greatest part of the surface of the state, and form not only the lower central parts of the area, but also the base of the great scarp of the Sahyádrí mountains, and in the south the main mass of all the great branching spurs. Owing to the extremely hilly and forest-clad character of the country, the working out of its geological structure was specially laborious and difficult. The results also are far less conclusive and satisfactory than in a level country. Owing to the configuration of the ground, it is often impossible to trace for a distance any individual bed or set of beds, or with any certainty to correlate distant outcrops of similar rock which might reasonably be held to be parts of the same bed.

The run or 'strike' of the bedding varies considerably in different quarters, and the 'dip' or inclination of the beds is also very variable, showing that the rocks have been much crumpled and twisted by side pressure. It is probable, too, that by the same forces the beds were in many places broken and put out of place, and their relations much confused. The assumption of such breaks or 'faults,' though in metamorphosed rocks their existence is often very difficult to trace, is from their frequency in other disturbed

¹ The geology of Savantvádi was worked out by Mr. J. C. Wilkinson, formerly of the Geological Survey of India. The present sketch has been compiled by Mr. R. B. Foote, F.G.S., of the Geological Survey of India, from Mr Wilkinson's MS. report and maps. A few of his notes have been published at page 44 of the 'Records of the Geological Survey of India.' These and other observations are also embodied in Mr. Foote's Memoir on the Geology of the Southern Maratha Country. (Memoirs of the Geological Survey of India, Vol. XII, Part I.)

sedimentary rocks, legitimate, and helps to explain the present confused arrangement of the gneissic rocks.

The gneissic series in Sávantvádi includes a greater variety of rocks than is usually met in the south-west Deccan or in other gneissic regions of similar extent. The areas occupied by the several varieties are also relatively much smaller. The prevalent dip of the rocks south of the Tilári river, in the extreme south of the state, is north-easterly. In the bed of the river and on the spurs south of Párgad and of the Rám pass, south-easterly dips are most common. The same dip was found most frequent in the great spurs west of Hanmantgad. South and south-east of the town of Sávantvádi, the rocks have mostly an east to west strike, with obscure or uncertain dip. East of Sávantvádi the same strike and dip are again commonly seen, but near the base of the Sahyádrí scarp they change, and the rocks acquire an easterly dip. North of Sávantvádi, the rocks composing the great central spur that runs south-west from Manohargad, and the rocks on the southerly spurs of Prasiddhgd, have also the east to west strike. In the eastern part of the great spur, the strike becomes north-easterly with a dip 25° to 45° south-east. Immediately south-west of Sávantvádi, the strike of the rocks trends from north-west and south-east to north-west by north and south-east by south, and finally north of the Kudál river becomes nearly due north and south.

The chief varieties of the gneiss series are schistose forms, especially true gneiss and mica schist. Hornblendic schists appear to occupy the next place in extent of development. Granite gneiss, which occupies such great areas in the Southern Marátha Country and south-west Deccan, plays a comparatively unimportant part in Sávantvádi. Tale schists are more, and chlorite schists are less frequently found in Sávantvádi than in the adjoining gneissic district above the Sahyádris. Beds of quartzite and metamorphosed sandstone are very frequently mentioned in Mr. Wilkinson's notes as intercalated among the more typically gneissic schists. These may, perhaps, represent the hæmatite schist and quartzite beds of the Southern Marátha Country, which they resemble greatly in all but the presence of iron in large quantities in the form of red hæmatite, but they appear to constitute, as a rule, much less striking objects in the landscape. So far as can be inferred from a cursory survey of the country, true gneiss and its subordinate varieties are very generally distributed over the state. Micaceous schists are almost equally widespread. The distribution of hornblendic rocks and schists is more circumscribed. They are commoner in the southern and eastern central parts of the state than in the western central and north. The quartzites and altered sandstones occur most largely in the southern, central, and western parts. Talcose rocks and the granitoid and syenitoid massive varieties of metamorphic rocks are met chiefly in the west and west centre.

Of the most interesting and important sections that show gneissic rock, the Rám pass, one of the largest and most accessible, has the following series from above downwards. At the head of the pass, light-coloured highly felspathic gneiss dips south 20° east at an angle

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*Gneissic
Series.*

Chapter I.**Description.****Geology.***Gneissic Series.*

of 50° ; lower down appear quartzites, hornblende rock and mica schist alternating with gneiss, followed by pink felspathic rock, coarse mica schist, fibrous hornblende rock, another felspathic rock containing a little mica and probably some free quartz, and a compact, fine-grained, bluish hornblende rock, all dipping south-east from 20° to 50° . The strike of these beds is very persistent through the spurs to the west of the Sahyádris, and where they fall off rapidly, a thick bed of hornblende rock forms a very fine scarp with a slope of 35° , coincident with the dips of the bed. This scarp is specially conspicuous to the south of Párgad fort. The bed there consists of sparkling hornblende rock with foliated crystals of hornblende. Another good section occurs in the bed of the Tilári river, west of the ford at Perneg, where much hornblende rock and light-coloured felspathic gneiss are exposed, and show a dip of 50° south-west. Both fine and coarse-grained hornblende rock occur here. Hornblende gneiss and hornblende schist are very common all round Bándá on the road between the Rám pass and Vengurla. Between Asnai and Fukeri, on the great spur crowned by the Hanmantgad fort, are 'platy' hornblende schists interstratified with sandstones (gritty siliceous schists?), the beds rolling with an easterly dip, apparently followed by vertical beds of white gneiss (resembling pegmatite), and at the top of the hill by a fine-grained schist. At Fukeri village white sandstones (gritty siliceous schists?) and green hornblende schist appear. At Charáthe, a little south-east of Sávantvádi, is gneiss associated with micaceous and hornblende schists, and between Charáthe and Sántuli, about four miles north-east, are schists, quartzites, and izenitoid gneiss. Gneiss and mica schists make up the mass of the hills south-west and north of Sávantvádi. At Devsu, at the foot of the new Ámboli pass, are mica schists in vertical beds striking east to west. A little higher up the pass are very crystalline hornblende schists dipping south 30° east at an angle of 50° , and on these rest white fissile altered sandstones (gritty siliceous schists?) containing yellow mica. At Kalmist, a couple of miles north of Devsu, the river section shows the following rocks: Gneiss, dark green coarse hornblende gneiss, hornblende and micaceous schist with interstratified beds of a white metamorphic rock, sometimes like sandstone but more frequently felspathic in character. Granitoid gneiss and quartzite beds occur on the flanks of the high and conspicuous Baravda hills. The beds are vertical or inclined at very high angles, having been apparently broken through and upheaved by the outburst of syenitic rock, which forms the main mass of the hills. Great outcrops of altered sandstone, or quartzite, the extension of the quartzite beds occurring on the Baravda syenite hills may be traced up to and beyond the Kudál river. Their strike is about north 30° west, with doubtful but probably westerly dip at a very high angle. West of Válavál, close to the left bank of the river, these outcrops form a conspicuous hill. At Bámbarda, gneiss, quartzite, and talc rock occur, the latter forming a hill west of the village. The strike is about north to south, and the dip of the rock easterly, at a very high angle. East of Mulda occur gneiss, a pink quartzo-felspathic rock, and light-coloured banded mica

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Series.*

schists. Further up the valley of the Kudál river are banded mica schist with garnets, granitic-gneiss, compact siliceous hornblendic rock, and dark-coloured contorted mica schists with bands of quartzite. The high hills south-east of Náur, which form the eastern part of the principal spur branching from the Sahyádrī scarp at Rángua fort, show fine-grained micaceous schists, coarse syenitic gneiss, light grey gneiss and quartzites. These beds form an anticlinal fold with east to west strike. At Tulsuli, about four miles west of the above section, fibrous actinolite schist and bands of quartzite form hills immediately west of the village. To the east of Konda, which stands on the north side of a trap-covered spur some six or seven miles north-west by north of Náur, are micaceous schists, quartzo-felspathic schists, quartzites, and actinolite rock rolling north and south anticlinally at low angles, with an east to west strike. The last section requiring mention occurs in the Ashámat river, a little east of Harkul. Here may be seen excessively contorted beds of mica schist, hornblende schist, quartzo-felspathic rock, gneiss and granitoid gneiss. The strike of the beds, which form an anticlinal fold, is about north 20° west.

Few instances are mentioned in Mr. Wilkinson's notes of specially striking or important exposures of the rarer rocks individually. Granitoid gneiss was noted by him cropping out of the south side of Kumberal hill in enormous masses, the beds dipping apparently into the hill at low angles.

Talcose rocks, though, as before pointed out, they occur far more frequently in Vádi than in the gneissic region above the Sahyádris, are by no means common. Besides at Bámbarda, talc rock was observed only at about six places. At the crossing of the Tilári river by the Rám pass road and west of Kudási it has the form of a hard compact blue rock, weathering into a light-coloured soapy wall. The same beds pass northward to the top of the spur between Sásoli and Kumberal. They are interstratified with dark green hornblende schist and mica schist. Similar blue compact talc rock occurs at Ákeri, north-west of Sávantvádi, as hard nuclei enclosed in a softer steatic mass formed by weathering. Both are quarried and used for masonry. A considerable development of talcose rock occurs around and to the south of Sherli, a little west of Bándā on the Vengurla and Rám pass road. Talcose schists occur also at Vánkda, a little south of the Ashámat, close to the north boundary of the state. Actinolite schist, a rock not met with in the gneiss country above the Sahyádrī, was noted by Mr. Wilkinson in four places. Of these, two, Tulsuli and Konda, have been mentioned above, the other two are Kudál ten miles north-west of Sávantvádi, and Bámbarda three or four miles north-east by north of Kudál.

No metallic ores were noticed in the gneissic rocks in sufficient quantity to be of practical value, unless decomposed hornblendic schist be used in some cases as an iron ore to charge the small native smelting furnaces. But it is, on the whole, probable that the ore used is entirely derived from the much later deposits of Konkan laterite.

The Intrusive Rocks associated with the gneissic series are of two kinds, trap dykes and granitic veins and bosses. Trap dykes are

*Intrusive
Rocks.*

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Intrusive
Rocks.

very few and of small size and importance. Almost all occur in or close to the Tilári valley near the foot of the Rám pass. From their position with reference to the gneissic rocks, there can be little hesitation in classing them with the numerous and important dykes so frequently met in the gneiss area above the Sahyádris. Mr. Wilkinson's notes do not specify their peculiar lithological constitution. One dyke of basaltic trap, which he describes as occurring close to Sávantvádi, deserves special notice, as from its peculiar structure there is good reason for believing it to belong to a much later geological period, namely, that of the Deccan trap. It will be described more fully when treating of the Deccan trap. The granitic or syenitic intrusions are, with one exception, of small size and importance. The majority occur in the form of regular granite veins, crossing dark grey micaceous schists in the valley of the Kudál river, at Mándkol to the south-east, and at Mulda to the east of Kudál. At Mándkol the intrusive veins consist of grey granite and eurite, cut through beds of gneiss crossing the river bed. The one important syenitic intrusion occurs in the Vágheri, or Baravda hill group, five miles east of Vengurla. The main mass of these bold conical hills, which, towering high over the adjoining flat-topped laterite-capped tableland, are most striking and widely seen, is of porphyritic syenite and hornblenderock forced through beds of granitoid gneiss and quartzite, which appear to have been upturned to a considerable extent and in part to have taken an upright position. This syenite consists of dark green hornblende, white opaque quartz, and in general very little felspar. The porphyritic appearance is due to the peculiar coarse crystalline aggregation of the quartz. Small intrusions of compact syenite occur among the gneiss in the Májgaon hills south of Sávantvádi.

Kaládgi
Series.

Resting on the gneissic formations is another later series of rocks which has undergone a considerable degree of metamorphism, and which has hitherto proved barren of organic remains. This newer metamorphic series has, on the strength of the similar character of the rocks, been correlated with the Kadapa series on the eastern side of the peninsula, and through that with the Gwálor, or Bijávar, series in Central India. The rocks representing the Kaládgi series in Sávantvádi can only be regarded as the fragmentary remains of former formations. Denuding forces at work at various geological periods, but chiefly before the outpouring of the Deccan trap flows, removed nearly the whole mass of the quartzite and shale beds which made up the series in this quarter. Judging from the thickness of the representative beds of the series further east and north, in Belgaum and Ratnágiri, the mass removed must have been very great, certainly many hundreds, and possibly some thousands of feet thick. Only one small patch of the rocks has been mapped by Mr. Wilkinson. This is an outlier capping the lofty gneissic spur that runs south-west from the great angle made by the Sahyádris scarp about three miles west of the Rám pass. The outlier occurs at the southern end of the spur, and occupies considerably less than a square mile of surface. It consists

of quartzite dipping east or north-east at a low angle. Other outliers, as near Maneri, on the left bank of the Tilári river, a few miles to the south-west, are too small to be mapped. In the north, between the spur south of Kusba and Bhadgaon, and in many other places, great quantities of rounded lumps of quartzite (altered sandstone) are seen under trap which evidently flowed over the surface of a denuded metamorphic country.

The great lava flows which make up the mass of the Deccan Trap, rest directly on the gneissic and Kaládgi series of metamorphic rock. No later set of beds, such as the infra-trappean or Lameta beds of Central India, were found in the southern Konkan. The unconformity of position between the older rocks and the trap flows is in most places extremely well marked. In many sections it is so great as to show that vast ages passed between the close of the Kaládgi and the opening of the volcanic era. From the study of the sub-trappean rocks in Central and Eastern India it has been ascertained that within the space of time thus indicated, took place the accumulation of all the formations below the cretaceous series belonging to the great mesozoic period as known in India. This space of time includes also a considerable section of the palæozoic period, the great Vindhyan series of azoic rocks being doubtless of palæozoic age. The Deccan trap may be regarded as of upper cretaceous age. Whether the lowest trap flows found in Sávantvádi represent the real base of the series, has not yet been determined. The probability is that a considerable thickness of lower flows occurs farther north in the Ratnágiri district, and especially near the Mahábaleshvar mountains, where the total thickness of traps exposed, far exceeds that seen in the most northerly part of the scarp lying in Sávantvádi territory. As the Sahyádrí scarp is followed in a southerly direction, the later flows will be found to overlap the older ones on to the gneissic rocks. Hence the beds, which form the basement of the trap series near the southern end of the trap area, really occupy a position near the top of the trap series considered as a whole.

The area occupied by trappean rock in the Sávantvádi state is not great. It consists mainly of a narrow band, forming the upper and most precipitous part of the great Sahyádrí scarp, along which runs the boundary between Sávantvádi and Belgaum in the south and Kolhápúr in the north. From the extremely precipitous slope of the mountain sides, and from the dense forest that covers them in many parts, the sections are generally accessible only along the various passes which ascend the scarp. Only in the northernmost part of Sávantvádi are the trap flows found at comparatively low levels. In the centre and south the trap outliers cap only the highest hills.

Owing to the tremendously wearing action of the heavy south-west rainfall, the softer trap beds have weathered away leaving great mural precipices of hard, compact, columnar basalt. Near Párgad three distinct and conspicuous beds occur, forming together one great cliff-like scarp between five and six hundred feet high. Farther north on the Ámboli pass two flows are specially prominent,

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*Kaládgi
Series.*

*Deccan
Trap.*

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Deccan
Trap.

and form a double mural scarp of much beauty. The striking spur on which stand the two remarkable hill forts of Manohar and Mansantosh, is capped by one of the great basaltic beds, and shows very fine mural scarps to which the two forts owed their strength. Still farther north, near Ráungna another famous hill fort, the scarp shows six or seven great flows in the form of black bands, each pair of bands separated by partings of softer decomposing beds. Some of these are amygdaloid in character, as for example, near Girgaon and Nárur, where a pink amygdaloid occurs, whose cavities are full of zeolites and calespar. The northernmost trap flows which cap the spurs running west into the low country, form generally flat-topped hills. The trap flows which have a slight westerly dip, consist of an olive green mass, breaking with uneven jointy fracture and sometimes containing olivine. The trap decomposes into a deep red earth. No distinct points of outlet of the great trap flows seem to have been met by Mr. Wilkinson, nor does he mention any dykes of later trap crossing the flows such as occur in more northern parts of the great trap area, as in the Rájpípla Hills.¹

Two occurrences of trap noted by Mr. Wilkinson, suggest the idea of possible relationship with the Deccan traps, a point left undecided by his observation, but worthy of further examination. One of these two occurrences is the large dyke of columnar basalt at Sávantvádi. The cleavage of the rock into five-cornered columns is a feature not met in the dykes of pre-Kaládgi age, which in large numbers cross the gneiss country above the Sahyádris. At the same time as this form of cleavage is very common in the Deccan trap basalts, it suggests the possibility that this Sávantvádi dyke belongs to the Deccan trap, though extensive denudation has made it impossible to trace any present connection between the two. A close comparison of the intimate structure of the basalt of this dyke with basalts of the Deccan age and with the rock, whether basaltic or dioritic, of the non-cleaved dykes in the Tilári valley and of other similar dykes above the Sahyádris, would be sure to throw some light on this point, which is one of considerable interest. The other case of interest occurs at Kasai, south of the Tilári river, about three miles from Maneri. Here, at a little distance south of the road, east of the village, are masses of blue basalt, apparently part of an intrusion. The lithological character of this rock points strongly to its being of Deccan trap age. Its situation suggests the idea of its being a volcanic 'neck' rather than a mere outlying patch of some denuded flow. Such a 'neck' would represent a mass of lava consolidated in a volcanic vent below the open crater by which the eruption reached the surface.

Iron Clay.

Iron-clay (laterite) formations of subaerial origin, such as occur so largely on the surface of the trap flows on the summit of the Sahyádris, are but very little developed in the Sávantvádi territory. The denuding agencies at work on the scarps and spurs appear to

¹ See Mr. W. T. Blanford's *Memoirs of the Geological Survey of India*, Vol. VI.

have cut away the exposed rock too rapidly for the development of the peculiar argillo-ferruginous decomposition of the trap rocks. Such argillo-ferruginous deposits as do occur on the surface of the older and newer metamorphics, and to a very small extent on the trap flows, must be considered as produced by local and subaërial re-composition of the weathered materials. In the absence of included fossils, the age of such subaërial deposits is uncertain, and for all that is known to the contrary, many may belong to geological periods of very recent date, and will therefore be again referred to when treating of the recent deposits. They must also be carefully distinguished from the iron-clay formation so largely developed in the Konkan, which there is good reason to regard as of sedimentary, and probably of marine origin, and which is therefore classed as a true laterite. The decomposition of traps into iron-clay may be well seen in some of the cuttings near the upper parts of the great Amboli pass road. Here the basaltic rock weathers gradually into a moderately hard yellow-brown or brown earthy mass enclosing many nuclei of the original rocks. The upper parts of the decomposed mass from which the nuclei have disappeared, have undergone a process of concretionary solidification from infiltration of surface water holding iron in solution, and are assuming the ordinary lateritoid appearance and reddish colour. This change takes place, as a rule, only in traps in which columnar cleavage has not been developed, owing, in all probability, to the retention of water in the horizontal joints and planes of bedding. In the columnar traps, as water is able to percolate freely, the weathering process is different.

The south and west of Sávantvádi are to a considerable extent covered by numerous outliers of a once continuous sheet of laterite, an extension of the great formation so largely developed in the Konkan. Laterite gives a monotonous look to the country, forming a waving, and in many places flat plateau, whose surface is a sheet of black slag-like rock. This laterite plateau, bare and black with a general height of between two and three hundred feet, supports no vegetation, except here and there scanty grass and stunted trees. It is cut through by numerous rivers, which, after flowing across a comparatively open country, enter the laterite by deep ravines which widen towards the sea, the rivers becoming broad tidal creeks.

This Konkan laterite, as it has been called, to distinguish it from the Deccan laterite or iron-clay, is in all probability a truly sedimentary formation, differing greatly in origin from the lithologically similar Deccan iron-clay, which is probably a subaërially altered trap rock. The evidence in favour of the sedimentary origin of the Konkan laterite is at present rather meagre. Mr. Wilkinson has offered no positive opinion on the subject, probably because he took the sedimentary origin for granted, and was unaware that Dr. Carter had, in his Geological Papers on Western India, advanced the idea that the Konkan laterite was an altered volcanic rock. Still it may be gathered from Mr. Wilkinson's notes, that parts of the formation are unquestionably sedimentary. He mentions

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Iron Clay.

*Konkan
Laterite.*

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Laterite.

here and there 'laterite sandstones,' 'laterite conglomerates' and 'shaley laterite,' and this when speaking of the undisturbed rock, and not referring to numerous patches of pseudo-lateritic rock the product of the denudation of older laterite, which as gravels, sandstones and conglomerates, occur at lower levels than the typical rock. These will be referred to further on. The evidence in favour of Dr. Carter's hypothesis of the trappean origin of the Konkan laterite is simply the lithological resemblance of this rock to the iron-clay occurring on the top of the Deccan trap flows above the Sahyádris. But an equal resemblance exists between the Konkan laterite and the Travankor laterite and the laterite of the Coromandel coast, both of which are of true sedimentary origin. Another great objection to the trappean origin hypothesis is that it involves a fresh outpouring of trap long after the conclusion of the Deccan trap period, a further outflow of which there is no other evidence of any sort in the Konkan. It is the general conclusion of the geologists who know the southern Konkan, that the Konkan has been formed by the removal, by denuding agencies, of the vast mass of trap forming the westward extension of the great flows now exposed in the Ghát scarp, and that such denudation began after the Deccan trap period was at an end. When this great denudation, which was doubtless the work of the sea, had been accomplished, a deposit of white and blue clay, containing lignite and plant remains, was formed. These clays are very probably of the same tertiary age as the lignitiferous clays underlying the truly sedimentary laterite in Travankor. The Konkan laterite at Ratnágiri overlies these plant beds, and if it represents, as Dr. Carter supposes, altered trap flows, there must have been a third period of trappean eruptions in the Indian peninsula, of which, as above remarked, no other indications are to be found.

Laterite outliers are found in the south of the state at points far more inland than in the north. They are mostly small, of irregular shape, and scarped round their edges. Konkan laterite is probably of later tertiary age.

The Alluvial Formations in Sávantvádi are of very small extent and of no geological importance. They consist of the alluvium deposited by the various small rivers in their lower reaches, and are almost everywhere masked by extensive rice cultivation.

Subaerial
Deposits.

The Subaerial Deposits demanding most notice are patches of various argillo-ferruginous rocks occurring very commonly over the low-lying central part of the state, and in the valleys between the various ridges capped by the typical Konkan laterite. They have often a true lateritic appearance, but consist more frequently of gravels, sandstones and conglomerates, and have been formed by re-consolidation of the weathered debris of the true Konkan laterite or of ferruginous and other rocks in the metamorphic series. None of sufficient interest to deserve special notice are mentioned by Mr. Wilkinson. Similar deposits are in process of formation at the present time.

The Soils are mostly light-coloured, clayey or sandy as the case may be ; clayey soils result from the decomposition of the felspathic varieties of the metamorphic rocks ; sandy soils from the weathering of the quartzites and altered sandstones of both the older and newer metamorphic series. The soil is generally deeper than elsewhere in the Konkan, and the country in consequence more susceptible of cultivation. In the north of the state is a deep red soil the result of the decomposition of some of the lower trap flows.

Except for building purposes, the various rocks met with in Savántvádi are of little use, and none appear to be of exceptional value. In many places a little iron is smelted in small native furnaces, the ore used being nœmatitic shale obtained from some of the laterite-capped hills. This shale probably belongs to the laterite formation. Mr. Wilkinson thinks that in some few cases the ore used is a decomposing ferruginous member of the gneissic series, possibly a hornblendic schist rich in iron.

Except that it is somewhat damper and cooler, the climate of Savántvádi is much the same as the climate of Málvan in Ratnágiri. The cold season begins about the middle of November, the weather very suddenly changing from damp warmth to dry cold. From February to the middle of May strong gusty winds blow from the north-west. The hot weather begins in March, when at times in the afternoon with a heavy cloudy sky, the thermometer rises to 94°. In April, the hottest month in the year, mists and fogs are sometimes followed by thunder, lightning and rain from the north-east. May, though it has a higher average temperature than April, is freshened by a strong sea breeze, with sometimes, but less often than in April, a thunderstorm from the north-east. The rainy season begins early in June and ends about the middle of October. The fall is very heavy, varying, during the thirty-two years ending 1879, from 222 inches in 1874 to 93 inches in 1855, and averaging 143 inches.¹ Though well distributed over the whole rainy season the fall is generally greatest in June and July. Thermometric

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Geology
Economic.

Climate.

¹ The available details are :

Savántvádi Rainfall, 1848-1879

YEAR	Inches	Cents	YEAR.	Inches.	Cents.	YEAR.	Inches.	Cents.
1848	135	17	1859	103	34	1870	131	40
1849	177	23	1860	117	77	1871	118	50
1850	131	82	1861	135	31	1872	167	8
1851	155	30	1862	176	15	1873	130	45
1852	155	90	1863	170	45	1874	222	8
1853	112	34	1864	96	75	1875	188	...
1854	167	90	1865	126	65	1876	143	78
1855	93	61	1866	144	...	1877	111	92
1856	160	14	1867	129	60	1878	214	23
1857	156	20	1868	131	20	1879	147	28
1858	174	83	1869	119	60			

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readings, registered during the five years ending 1879, vary from 91° in May to 69° in December and January. They give for the whole period an average mean temperature of 78.6° .¹

¹ *Savantvadi Thermometer Readings, 1851-1857 and 1875-1879.*

YEAR.	AVERAGES.			
	January.	May.	Septem-ber.	Decem-ber.
	Min. Max.	Min. Max.	Min. Max.	Min. Max.
1851-1857 ..	86 88	70 91	77 82	67 85
1875-1879 ...	69 83	79 91	75 79	69 85

CHAPTER II.

PRODUCTION.

THE only minerals are stone and iron ore. At Válavál and Ákeri stone quarries supply abundant building material. The Válavál stone is a sort of quartz or quartzite. The Ákeri stone, a slate coloured talc-schist extremely hard, compact and heavy, is unrivalled for building.¹ Costing 4s. (Rs. 2) the cubic foot to quarry, it has hitherto been in little local demand. But large quantities have been sent to Bombay and much used in several of the public buildings. It can be dressed and carved as finely as marble. Laterite is quarried at many places, especially near Ámboli and within a few miles of Vádi. Iron ore of good if not of superior quality is found in the Sahyádrí hills near the Rám and Párpoli passes, and on a small scale is made into field and other tools.² Enterprise and capital are wanting to work the beds profitably on any large scale. Talc of inferior quality and in small pieces is found at Kadával in Kudál. It is chiefly made into small sweetmeat boxes or used in decorating clay and wood idols.

As shade³ is thought to be hurtful to rice, except some palms and *bhirands*, *Garcinia purpurea*, little field timber is grown. The largest trees, chiefly mangoes and jacks, are found near villages. Round the temple of some local demon, *vetál*, almost every village has its sacred grove, *devrái*, spreading over two or three acres, for generations untouched by the axe and crowded with stately trees woven together by festoons and wreaths of gigantic creepers.

The following is a list of the trees found within Sávantrádi limits. The mango tree, *ámba*, *Mangifera indica*, has valuable fruit and timber useful for doors, boxes, and other articles of furniture; *ámberí*, *Glycyrcarpus racemosus*, a small tree the juice of whose petioles is used as a blister; *anjan*, *Memecylon edule*, bearing a small lilac flower in the hot weather, has very tough but crooked timber; *áin*, *Terminalia glabra*, has bark used in tanning and to make a dark red dye, and timber, especially the heartwood, of high value for building purposes; *ávi*, *Emblica officinalis*, yields fruit made into conserves and pickles, leaves used by tanners, and wood that makes good charcoal; *adulsa*, *Adbatoda rasica*, has leaves used as a febrifuge; *ápta*, *Bauhinia racemosa*, worshipped by Hindus at *Dusra* (October), has leaves used for

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¹ Near one of the quarries on the slope of a hill there is a bedstead 6 feet 3 inches long, 3 feet wide, and 1½ feet high with carved cornice and legs. The whole made of one solid piece of stone was about 1840 made to order by a Goa prostitute who died before it was finished.

² In 1855 the outturn of iron was about 77 tons (230 *khandis*) worth £430.

³ Contributed by Captain Waller, V.C., Assistant Political Superintendent.

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Production.

Trees.

making cigarettes, *bidis*; *asht*, *Ficus cordifolia*, yields indifferent timber; *átak*, *Flacourtia montana*, has an edible fruit; *ambúda*, *Spondias mangifera*, the hog-plum or wild mango, has a fruit eaten when ripe and pickled when unripe; *báru*, *Cassia fistula*, yields a pulp used as a purgative and exported; *biba*, *Semicarpus anacardium*, the marking nut, has edible kernels; *bakul* or *oval*, *Mimusops elengi*, has sweet scented flowers sold for wreaths; *bhendí*, *Thespesia populnea*, yields excellent and close grained wood, used for wheel spokes and gunstocks; *bhiraul* or *ráttámbi*, *Garcinia purpurea*, has a fruit with an edible pulp, a rind that when dried is used as a flavouring acid in curries, and seeds yielding *kokam* oil; *bokída*, *Ficus asperrima*, has leaves used as fodder for cattle; *bel*, *Ægle marmelos*, yields a pulp very useful in dysentery; *bach*, *Salix tetrasperma*, found only on the Sahyádrí hills, yields a wood which, containing much tonic and gallic acid, is a good substitute for log wood, and is valued as a dye wood; *bhoraphit*, *Bambusa stricta*, is a species of bamboo; *bherla mál*, *Caryota urens*, the bastard sago palm, is common, but being of an inferior quality, yields neither sago nor toddy, the stem of the leaf yields a fibre much used in making fishing lines; *chinch*, *Tamarindus indica*, has edible fruit and tough and good wood; *chír*, *Buchanania latifolia*, has seeds which are made into confectionery, and largely exported to Bombay and elsewhere; *chírár*, *Arundinaria wightiana*, a small bamboo, is much used for making batons; *charai*, *Musa ornata*, or wild plantain, the pith yields flour and the stem an excellent fibre; *dháman*, *Grewia tiliaefolia*, yields wood used for building; *dhup*, *Canarium strictum*, yields an aromatic pale yellow gum burnt as incense; *g-la*, *Randia dumetorum*, is a common tree with good timber; *godáraná* (?) has oil-yielding seeds; *h-bu*, or *abu*, *Vangueria edulis*, its fruit is eaten and its tuber occasionally used; *h-la*, or *gholíng*, *Terminalia belerica*, yields a largely exported fruit, and wood ashes much used in the manufacture of molasses; *had*, *Nauclea cordifolia*, yields the light and close grained wood used in making the lacquered Vádi toys; *harla*, *Terminalia chebula*, the myrobalans of commerce, are largely exported; *kábdásan*, *Briedelia spinosa*, yields a wood useful for building purposes; *kálákuda*, *Wrightia tinctoria*, has leaves that yield an indigo dye, and has very close grained and white timber excellent for turners; *hasag*, or *ashok*, *Jonesia asoca*, yields a useful wood; *jámbha*, *Xylia dolabriformis*, yields a strong red-coloured wood, excellent for rafters and making good charcoal; *jámbhal*, *Eugenia jambolana*, has an edible fruit and a much used wood that stands water well; *jámb*, *Eugenia vulgaris*, yields wood used for building; *jáphar*, or *jáphran* (?), has an edible fruit and useful wood; *jagam*, *Flacourtia cataphracta*, has an edible fruit; *jámbal*, *Syzygium caryophyllum*, yields wood used for building purposes; *jásand*, *Antiaris innoxia*, yields fair timber; *karnal*, *Dillenia pentaphylla*, a very common tree, yields inferior timber; *karthi*, *Hydnocarpus inebrians*, the seed oil cures skin diseases and has been found useful in leprosy; *karanj*, *Pongamia glabra*, the seed oil cures itch and mange, and the timber is good; *kinai*, *Acacia procera*, yields good timber; *kinjal*, *Terminalia*

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paniculata, yields good timber much used for building; *kumbya*, *Careya arborea*, has bark that is used for slow matches, and yields useful timber; *kadamb*, *Nauclea parviflora*, yields wood used for making stacks and for building purposes; *kher*, *Acacia catechu*, a most valuable tree, yields the catechu of commerce; *kájra*, *Strychnos nuxvomica*, furnishes the powerful poison strychnine and yields a useful timber; *karamb*, *Olea dioica*, yields an excellent wood; *kharsing*, *Bignonia zylocarpa*, yields a wood-oil used as a cure for skin diseases; *kharrut*, *Epicarpus orientalis*, has leaves which for polishing wood are an excellent substitute for sand paper; *kalam*, *Stephegyne parviflora*, a fair building wood; *kasas* (?), a fairly useful timber; *kaner*, *Nerium odorum*, yields middling timber; *káju*, *Anacardium occidentale*, the cashew tree, yields a largely exported oil nut and a fleshy fruit stalk from which spirit is distilled; *kádal* (?) yields middling timber; *khargul*, *Bœhmeria ramiflora*, the leaves are used as fodder; *kanak* (?), the leaves are used as fodder; *kusba*, or *kusga* (?), has useful timber; *kálen* (?), a useful wood; *kála gonda* (?), a useful wood; *kálingan* (?), the wood is very tough and used for hatchet handles; *kalak*, *Bambusa vulgaris*, the bamboo; *khatkhoti* (?); *kumbal*, *Sapota tomentosa*, the fruit is used as a cure for diarrhoea; *kudchápha*, *Plumeria acuminata*; *madan* (?) has useful wood; *motákarmal*, *Dillenia speciosa*, a rare and inferior wood; *mirjoli* (?); *malaya* (?); *maháruk*, *Ailanthies excelsa*, yields useful timber; *máid*, *Cocos nucifera*, the cocoa palm, its nuts are largely exported; *mánqa*, *Bambusa arundinaria*, the common bamboo; *naram* (?) yields useful timber; *nándruk*, *Urostigma retusum*, a shady tree planted on road sides; *nána*, *Lagerstræmia parviflora*, yields excellent heartwood; *nághápha*, *Mesna ferrea*, yields a beautiful sweet scented flower; *nághakuda*, *Sterculia fetida*, a decoction of the bark is used as a cure for coughs; *nágin*, or *irai*, (?) the wood is used for masts of country boats; *nhir*, *Nauclea cadamba*, a handsome tree with edible fruit, believed to be an exotic; *nisalbondá*, *Salacia prionoides*, yields timber; *palas*, *Butea frondosa*, the flowers are used and exported as a dye; *pángára*, *Erythrina indica*, its light wood is used for making sword scabbards; *págar*, *Ficus cordifolia*, a useful tree for road sides; *pási*, *Dalbergia paniculata*, useful for building purposes; *pádhri*, *Stereospermum chelonoides*, the leaves are used as a febrifuge, the wood is very tough; *pádoli*, *Tricasanthus anguina*, a decoction of the leaves is used in puerperal fever; *párijátak*, *Nyctanthes arbortristis*, bears fragrant flowers; *pimpal*, *Ficus religiosa*, worshipped by the Hindus; *páhdasa*, *Briedelia montana*; *pádhri* (?), the fruit is eaten as a vegetable, a few of the leaves intoxicate a horse; *posca* (?), a large handsome tree with inferior wood; *panijála* (?) yields fair timber; *pophal*, *Areca catechu*, the areca nut largely exported; *phantis*, *Artocarpus integrifolia*, the jack tree, yields valuable fruit and timber, excellent for tables, boxes, and cupboards; *phanshi*, *Caralia integerrima*, useful for timber; *pátphantis*, *Artocarpus hirsuta*, a wood useful for building; *patanj*, *Cæsalpina sappan*, its wood yields a red dye; *phalya*, *Buchanania latifolia*, its leaves are given as fodder; *ringi ritha*, *Sapindus laurifolius*, the soapnut, *rághala* (?), a useful wood; *váma vámda*, *Uastia iphon speciosa*, yields a fine fibre, its bark

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intoxicates fish; *ránbiba*, *Semecarpus* sp. (?), the juice is used as a blister; *rumad*, *Covellia glomerata*, has a wood that makes good cattle troughs; *sajan*, *Terminalia glabra*, yields useful timber; *sávar*, *Salmalia malabarica*, the silk cotton tree; *sátvin*, *Alstonia scholaris*, the bark is a good febrifuge, but the timber worthless, *sálla* or *ságrán*, *Tectona grandis*, the teak tree; *sáykánda*, *Sterculia villosa*, the leaves are given to cattle and good cordage is made from the bark; *sivan*, *Gmelina arborea*, yields a light and strong wood; *sisva*, *Dalbergia latifolia*, the blackwood tree; *siras*, *Albizia lebbek*, an excellent wood; *sugran* (?), the bark is used as a medicine, and the wood for its oil and sometimes as timber; *surang*, *Calycation longifolium*, the flowers are largely used and exported, *segul*, or *seyya*, *Moringa pterygosperma*, the pods are eaten as a vegetable, the bark is like radish in taste, and the seeds yield ben oil; *sidam* (?), a large tree yields poor timber; *sonchápha*, *Michelia champaca*, is valued for its sweet scented flowers and timber, *támán*, *Lagerstroemia reginæ*, has useful timber; *tirphal*, *Xanthoxylon rhetsa*, the fruit is used as a medicine, to flavor fish curries, and to poison; *tivar*, *Aveicennia tomentosa*, the wood is of very little value; *undug* or *pumág*, *Calophyllum inophyllum*, the seeds yield oil and the wood is excellent timber; *vet*, *Calamus ratang*, the common thorny cane; *khirmi*, *Mimusops hexandra*, yields good timber; *vomb*, *Nephelium langanum*, has close grained and useful wood; *vavola*, *Holoptelœa integrifolia*, is a small tree with middling wood, the banian, *vad*, *Urostigma bengalense*, is common, and the India rubber tree, *Ficus elastica*, introduced some twenty years ago, flourishes well.

Roadside trees are easily grown. The most useful kinds are the jack and mango, and the best way of growing them is to sow the seed in pots in nurseries during one rainy season and plant them out at the beginning of the next, cracking but not removing the pot.

Forests

Sávantvádi is a forest country, but until the revenue survey has been completed, the exact forest area remains unknown. Roughly it is about 300 square miles or one-third of the whole state. Revenue-yielding trees grow on the slopes and along the base of the Sahyádris range, and on many isolated hills lying between the Sahyádris and the sea. All teak, *kher*, and blackwood are considered the property of the state. In 1878, to put a stop to underhand wood-cutting and for the better protection and improvement of the forests, an establishment of one head officer, two deputies, one clerk, twelve rangers, and four *nákedárs*, selected from the Bráhmaṇ, Marátha, and Musalmán classes, was organised at a yearly cost of £234 (Rs. 2340). In Kudál waste hill lands not

Sávantvádi Forests, 1874-75

YEAR	Receipts	Charges.
	£	£
1874-75	588	103
1875-76	425	103
1876-77	498	102
1877-78	801	103
1878-79	328	168

useful for forest have been separated from the forest reserves; and in some Vádi villages above the Sahyádris and in some of the forests bordering on Vengurla, boundary marks have been set up. The marginal table shows the forest receipts and charges for the five years ending 1878-79. Timber is cut on the payment of fees. It is sent from Vengurla by sea to Bombay, or carried in carts over

the hill tracts to Belgaum and other inland districts. There are no particular castes who work as woodcutters.

The chief Domestic Animals are oxen, cows, and buffaloes. Horses are very rarely seen, only among a few of the trading and agricultural classes. Bullocks and buffaloes are the animals chiefly used for burden or in the field. An ordinary bullock costs about £1 10s. (Rs. 15) and a male buffalo about £2 (Rs. 20). A cow is worth from £1 to £1 12s. (Rs. 10 - Rs. 16). Cultivators as a rule spend nothing on the keep of their cattle. They live on cut grass or on what they can find in the pasture lands.

Of Wild Animals the principal are, the TIGER, *patáit vágh*, *Felis tigris*; the PANTHER, *biblya vágh*, *Felis pardus*; the HUNTING LEOPARD, *chittáh*, *Felis jubata*; the BEAR, *ashval*, *Ursus labiatus*; the BISON, *gava*, *Gaveus gaurus*; the WILD BOAR, *rán dukar*, *Sus indicus*; the JACKAL, *kollu*, *Canis aureus*; the FOX, *khonkad*, *Vulpes bengalensis*; and the HYÆNA, *taras*, *Hyæna striata*. Of the Deer tribe, the STAG, *sámbar*, *Rusa aristotelis*; the SPOTTED DEER, *chital*, *Axis maculatus*; and the BARKING DEER, *bhekar*, *Cervulus aureus*, are often met. Besides the above the following are also found: the WILD DOG, *kolsinda*, *Cuon rutilans*; the CIVET, *jórádi*, *Viverra malaccensis*; the COMMON JUNGLE CAT, *bául*, *Felis chaus*; the SQUIRREL, *shunkra*, *Sciurus elphinstonei*; the HARE, *sasa*, *Lepus nigricollis*; the PORCUPINE, *sáлиндar*, *Hystrix leucura*; the COMMON INDIAN OTTER, *ud*, *Lutra nair*; and the MONKEY. Both harmless and poisonous snakes are common, but deaths from snake-bite are rare. The average yearly cost of keeping down tigers and other wild animals, during the ten years ending 1879, has been about £7 (Rs. 70). During the same period, sixteen deaths on an average are said to have occurred, thirteen from snake-bite and three from wounds received from beasts of prey. No rewards are offered for snake killing.

The avifauna differs little from that of Ratnágiri. Compared with Ratnágiri, Sávantvádi is well wooded. The hill sides are every where covered with dense forests and the country generally is less barren and rugged. The difference in the species appears to depend solely on these physical conditions. In Sávantvádi forest-loving birds, such as thrushes, black birds, hill bulbuls, and others are more numerous, while plain, dry upland, and shore birds are scarcer than in Ratnágiri. A detailed list of the birds found in Ratnágiri has been given in the statistical account of that district. With few exceptions this list probably applies to Sávantvádi. The following species have not yet been recorded from Ratnágiri.

The CRESTED SERPENT EAGLE, *Spilornis cheela* (*Lath.* 38), replaced in Ratnágiri by its smaller congener the Lesser Indian Harrier Eagle, *Spilornis melanotis* (*Jerd.* 39 bis). The ALPINE SWIFT, *Cypselus melba* (*L.* 98); the MALABAR TROGON, *Harpactes fasciatus*, (*Forst.* 115), recorded by Dr. Fairbank; the BLUE-TAILED BEE-EATER, *Merops philippinus*, (*L.* 118); the CHESNUT-HEADED BEE-EATER, *Merops swinhoii* (*Hume* 119), recorded by Dr. Fairbank; the JUNGLE GREY HORNBILL, *Tockus griseus* (*Lath.* 145), recorded

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Animals.

Domestic.

Wild.

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by Dr. Fairbank; the CRIMSON-THROATED BARBET, *Xanthoeca malabarica* (*Bly.* 198), recorded by Dr. Fairbank; the RED-WINGED CRESTED CUCKOO, *Coccyzus coromandus* (*L.* 213); the NILGHIRI FLOWER PECKER, *Dicæum concolor* (*Jerd.* 239), apparently replacing Tickell's Flower Pecker, *Dicæum erythrorhynchus* (*Lath.* 238), found in Ratnágiri; the VELVET FRONTED BLUE NUTHATCH, *Dendrophila frontalis* (*Horsf.* 253); the DARK GREY CUCKOO SHRIKE, *Volvocivora melaschista* (*Hodgh.* 269); the HAIR CRESTED DRONGO, *Chibia hottentota* (*L.* 286); the MALABAR GREEN BULBUL, *Phyllornis malabaricus* (*Gm.* 464), recorded by Dr. Fairbank; and the FAIRY BLUE BIRD, *Irene puella* (*Lath.* 469).¹

Fish.

The chief salt water fish are the *áir*, *bhuyári*, *dángála*, *dhenkla*, *dodui*, *gargata*, *ghol*, *ghur*, *kádi*, *kápay*, *karli*, *khadas*, *kharchi*, *khavva*, *khavla*, *kolindra*, *lep*, *maliya*, *mural*, *mori*, *muddashi*, *pálu*, *ped*, *saranga*, *sheeta*, *tumbosi*, *tigu*, *tonki*, *vágul*, *vulai*, *vatu*, and *visran*. The fishermen are Gábits. They number 850 souls and live in Chendvan and Kavthi on the Karli, and in small villages near the mouth of the Terekhol. As there is no local fish curing, a large quantity of cured fish, estimated at about £250 (Rs. 2500) worth, is brought for sale from Vengurla and other sea-coast towns.

¹ Contributed by Mr. G. W. Vidal, C.S.

CHAPTER III.
POPULATION¹.

IN 1843-44 an attempt was made to take a census. The results were imperfect and untrustworthy.² A second attempt, made eight years later (1851), was more successful. According to the 1851 census, the total population was 150,065 souls (males 76,956, females 73,109) or 166·73 to the square mile. Of the whole number 144,112 or 96 per cent were Hindus, and 3986 or 2·5 per cent Musalmáns, that is at the rate of thirty-seven Hindus to one Musalmán. There were, besides, 1959 native Christians and eight Jews. The 1872 census showed a population of 190,814 souls or 212·02 to the square mile, an increase in twenty-one years of 40,749 souls or 27·15 per cent. Of the 1872 population 182,688³ or 95·64 per cent were Hindus, 4152 or 2·18 per cent Musalmáns, 3954 or 2·08 per cent native Christians, and twenty ‘Others’. Of the whole number 48·9 per cent were returned as males and 51·1 per cent as females.

Chapter III.
Population.

1851.

1872.

The following statement gives the chief comparative details :

Sárvantvadi Population, 1851 and 1872.

YEAR.	POPULATION					TOTAL
	Hindus.	Musal- máns.	Native Christians.	Jews.	Others.	
1851 	144,112	3986	1959	8		150,065
1872 	182,688	4152	3954		20	190,814

The 1872 returns, arranged according to religion, show that of the Hindus 142 or 0·07 per cent were Mádhváchári Vaishnavs, 13,345 or 7·30 per cent Shaivs, 199 or 0·10 per cent Shrávaks, and 169,002 or 92·50 per cent worshippers of gods and spirits without belonging to any particular sect. Except one Shia, all the Musalmáns were Sunnis. The three Pársis were Shahausháís. Of the Christians, 3945 were Catholics and nine Protestants, including six Episcopalians

Religion.

¹ This Chapter owes much to additions and corrections made by Mr. Sakhárám Báji Bávdekar, Judicial Assistant, Sárvantvadi.
² According to the returns, the Vadi division contained 40,628 (males 21,143, females 19,485) souls; the town of Vadi, 8621 (males 4256, females 4365); and the Bándá division, 44,087. The total number of houses was 1413. The Kudál returns have been destroyed.
³ This number includes about 450 strangers who happened to be within the state limits during the census night.

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two Presbyterians, and one native Christian. Under the head 'Others' seventeen persons remained unclassified.

Health.

The total number of infirm persons was returned at 408 (males 265, females 143) or twenty-one per ten thousand of the whole population. Of these fifty-one (males thirty, females twenty-one), or two per ten thousand, were insane; twenty-nine (males twenty, females nine), or one per ten thousand, idiots; 139 (males eighty-eight, females fifty-one), or seven per ten thousand, deaf and dumb; 120 (males seventy-three, females forty-seven), or six per ten thousand, blind; and sixty-nine (males fifty-four, females fifteen), or three per ten thousand, lepers.

Occupation.

Under occupation, the 1872 returns divide the population into seven classes:

- I.—Employed by the state, 1,334 souls or 0·71 per cent.
- II.—Professional persons, 1,018 or 0·53 per cent.
- III.—In service or performing personal offices, 1,415 or 0·74 per cent.
- IV.—Engaged in agriculture and with animals, 73,627 or 38·58 per cent.
- V.—Engaged in commerce and trade, 2652 or 1·39 per cent.
- VI.—Employed in mechanical arts, manufactures, and engineering operations, and engaged in the sale of articles manufactured or otherwise prepared for consumption, 13,777 or 7·22 per cent.
- VII.—Miscellaneous persons not classed otherwise, (a) wives 24,121 and children 68,767, in all 92,888 or 48·68 per cent; and (b) miscellaneous persons 4083 or 2·11 per cent, total 96,971 or 50·82 per cent.

Dwellings.

Of houses there was in 1872 a total of 44,823, or on an average 49·80 houses to the square mile. Of the whole number 1511, lodging 15,565 persons or 8·16 per cent of the entire population at the rate of 10·30 souls to each house, were of a better, and the remaining 43,312 houses, accommodating 175,249 persons or 91·84 per cent, with an average house population of 4·04 souls of a poorer, class.

The houses of the richer classes, one, two, or three stories high, have walls of stone or mud, and tiled roofs. According to the means and the size of the owner's family, they contain from eight to fifteen rooms. In front there is a porch, *ata*, and settle, and a verandah behind. Inside are the central room, *mājghar*, and the cooking-room, and according to the means and size of the family, from six to twelve other rooms. The chief articles of furniture are a carpet, *jājam*, a brass betel-leaf plate, *tabak*, a hubbly-bubble, *gulquli*, a brass lamp, brass drinking and cooking vessels, a few silver plates, some cots and cupboards, and very rarely small tables and chairs. Except that it is smaller, almost never more than one story high, a middle class house does not differ from a rich house. It seldom has tables, chairs, or silver plates, but in other details the furniture is much the same. A few earthen vessels and copper pots, and one or two sitting boards, *pāts*, are all that can be found in a poor man's house.

Food.

The food of a rich household is for every day, rice, pulse, vegetables, pepper,¹ clarified butter, oil, salt, and dried fish, and once or twice

¹ All classes are fond of red pepper and spices.

a month, mutton or fowls and eggs. On special occasions they eat fried cakes of rice and *udid* flour, *radās*; wheaten cakes stuffed with gram flour and sugar, *puran-polis*; and though rarely, sugared and buttered wheat balls, *lūdus*. Brāhmans, Lingáyats, and Gujarát Vánis, whether Vaishnavs or Shrāvaks, are an exception to this, as except the Gaud Brāhmans or Shenvis who eat fish, they touch no animal food. The food of a middle-class household is rice, *náchni* bread, curry, and vegetables, for every day, with *radās* on special occasions. The every day food of a poor household is *náchni* bread, and occasionally rice and curry with *radās*. Those who drink liquor and milk, and have not a supply of their own, buy their liquor daily from a Bhandári or Christian liquor-seller, and their milk from the milkman, generally a Gavli. Except dried fish, which is usually bought in October, stores of rice, pulse, salt, and red pepper, enough to last from four to six months, are laid in during March and April. The well-to-do pay in ready money, and the poorer re-pay at harvest with twenty-five or thirty per cent interest. The supply of animal food is bought when wanted.

Chapter III.

Population.

Food.

Dress.

Dress varies to some extent according to caste and creed. Except that the state servants wear a bright,¹ tightly wound three-cornered turban of the Sindeshái or Sindia pattern, both among high and low caste Hindus the ordinary head-dress is the handkerchief, *rumál*, wound loosely once or twice round the head. The ordinary dress of upper class Hindus is, for the men in-doors, a waistcloth and under-jacket with or without a coat, and head scarf, *rumál*; out-doors a waistcloth, a waistcoat, a coat, a head scarf or turban, and a cotton shouldercloth, and Deccani shoes and sandals, *valánís*. On great occasions he wears, in addition to his ordinary out-of-door clothes, a specially rich turban, and round his shoulders a woollen shawl. Upper class Hindu women wear in-doors a robe and bodice. Their ordinary out-door dress is the same, only of rich materials, and on great occasions they add a woollen shawl drawn over the head. Boys, except when very young, have a waistcloth, a coat, and a cap or turban, and girls under four have a shirt *ángda*, a cap *topi*, a petticoat *parkar*, a bodice *choli*, and sometimes a robe *sádi*. After four years old they dress like grown women. Among middle class Hindus, such as husbandmen and craftsmen, the man wears in-doors a loincloth, a waistcloth, and sometimes a waistcoat; out-of-doors he wears a waistcloth, a waistcoat or sleeveless smock, *kínchola*, with or without a head scarf, *rumál*, and in cold or wet weather, a blanket, *kínli*. On great occasions, instead of his smock, he wears a coat, *angarkha*, and a turban instead of the head scarf. Middle class women wear in-doors a robe, *sádi*, out-doors a robe with or without a bodice, and on special occasions a richer or fresher robe and bodice. Boys and girls are, for a year or two, allowed to go naked. Then for two or three years the boy has a loincloth and the girl a bodice or robe, and after five or six, they have, at least for festive occasions, a suit much the same as grown men and women. Among the poorest classes,

¹ The favourite colours are red, pink, white, purple and black, and sometimes green or yellow.

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Population.

Dress.

field and town labourers, men generally wear in-doors a loincloth and blanket, out-doors a waistcloth, and blanket or head scarf, and on festive occasions a waistcloth, jacket, and fresh head scarf. The women, except that fewer of them wear the bodice and that their robes are of coarser and plainer cloth and in worse repair, dress like middle-class women. The children of the poor are later in getting clothes, and less often have complete suits. Otherwise their dress does not differ from that of middle class children.

Ornaments.

Of ornaments, among men the rich wear gold earrings, *bhikbális*, finger rings, *angthis*, and a necklace, *kanthi*; and middle class men wear gold earrings, *mudis*, a silver necklace, *gop*, and a wristlet, *kada*. Among women the rich wear, for the head, *muds*, *rákhdis*, *kegads*, *phuls*, *shevtiche phuls*, and *chandrakors*; for the neck, *thushis*, *galsaris*, *putlis*, *saris*, and *tikás*; for the ears, *bugdis*, *kárábs*, *kudis*, *káps*, and *ghums*; for the nose, *naths* and *motis*; for the upper arm, *vánkis* and *bájubands*; for the wrist, *bíngdis* and *pútlis*; and for the ankles, *todás*. A middle class woman wears almost all the ornaments worn by the rich. And a poor woman wears only the *galsari* and the *moti*, and round silver or lead and lac bangles and rings. A boy's ornaments in a rich family are gold or silver wristlets, *kadás* and *todás*, and silver anklets, *válús* or *jhánjris*; and in middle class and poor families, *mudis*, *gops*, and *kadás*. A girl's ornaments in a rich family are, for the head, *muds*, *rákhdis*, *chandrakors*, *kegads*, *venis*, and *kalepattis*; for the ears, *bugdis*, *káráles*, and *káps*; for the neck, *galsaris*, *thushis*, *saris*, *putalgácha kárs*, and *javáchi mals*; and for the ankles, *todás*, *válús*, and *jhánjris*: in middle class families they are *muds* on the head, *kárális* in the ears, *naths* in the nose, and *tikás* and *galsaris* on the neck; and in a poor family, *buglis* for the ears, *galsaris* for the neck, and round silver or lead and lac bangles for the wrists.

Holidays.

Besides the last day in every Hindu month, which all except the labouring classes keep as a day of fasting and rest, there are fourteen chief yearly holidays, nine of them feasts or days of rejoicing, and five fasts or times of penance. The chief feasts are, in January (12th), *Makar Sankránt*, when the sun enters the sign of Capricornus; in March-April, *Holi*, in honour of the spring equinox; in April, *Pádra* or new year's day; in July, *Kark Sankránt*, when the sun enters Cancer; in August, *Nágpanchmi*, the cobra's fifth day, in honour of snakes, and *Náuli Purnima*, or the coconut full moon; in September, *Ganesh Chaturthi*, or Gampati's fourth day, in honour of the god of wisdom; and in October, *Dusse* and *Diváli*. The fasts are, in February, *Shivrátro*, or Mahadev's night; in April, *Rámanvami* or Rám's ninth, in honour of Rám's birthday; in July, *Áshádhí Ekádashi*, when the yearly sleep of the gods' begins; in August, *Gokul Ashtami*, in honour of Krishna's birthday; and in November, *Kártiki Ekádashi*, when the gods' yearly sleep is over.

Character.

The bulk of the people, the Maráthás, Bandhárís, and Mhárs were formerly famous, both by land and sea, for their fierce cruelty. Even since the establishment of order under the British, Sávantvádi has more than once been the scene of revolt and

disturbance. But now for nearly thirty-five years peace has been unbroken and the old pirate and freebooting classes have settled as quiet husbandmen. The only remaining signs of special enterprise and vigour were, till a few years ago, their readiness to cross the sea to Mauritius in search of work, and the fondness that still remains for military and police service.

With little trade, few local industries, and hardly any early or unsettled tribes, Sávantvádi is wanting both in the extreme of wealth and in the extreme of poverty. The Chief, some of the state servants, and a few traders in Vádi and Kudál, are the only persons who possess considerable wealth. Except traders and goldsmiths, the bulk of the people, both husbandmen and craftsmen, depend for their living either partly or entirely on the soil. Very many of them are in debt, but almost all have some property and some credit. Among the labouring classes there has of late years been a considerable improvement. The demand for labour in Bombay and other trade centres, and the local rise in wages have made it unnecessary for them to go to Aden or Mauritius in search of work, and in their food, clothes, and house gear, there has been a distinct advance towards comfort.

Among Hindus there were, according to the 1872 census, two main divisions of Bráhmans, Drávids and Gauds, with a total strength of 12,979 souls or 7·11 per cent of the whole Hindu population. Of Drávid Bráhmans there are four sub-divisions, Deshasths, Karádás, Chitpávans, and Devrukhás. Of Deshasths there are only three or four houses in the village of Bándá, priests and religious beggars, all fairly well off. Karádás are distributed over the whole state. Each village, or group of two or three hamlets, has its Karáda priest or religious beggar. Chitpávans, a comparatively small class, are found chiefly in the towns of Vádi, Kudál, and Bándá, in some villages near the Sahyádris, and in the Ajgaon sub-division. Some till and rear cocoa and betelnut plantations, others are religious beggars, and others are in government employ. Like Deshasths they are fairly well off. The only house of Devrukha Bráhmans is at Kudál, where the head is a pleader in the civil court. The four divisions eat and drink together, but do not intermarry. Petty caste disputes are settled by a committee presided over by Devasthali the state Shástri, who refers serious cases for the decision of Shankaráchárya Svámi. Of Gaud Bráhmans or Shenvis, immigrants, it is said, first from Bengal and then from Goa, there are four divisions, Shenvis,¹ Bárdeshkars, Kudáldeshkars, and Peduekars. In almost every village the accountant is a Shenvi, and in the towns of Vádi, Bándá, and Kudál, the number of their houses is comparatively large. Many of them are landowners and government servants, and as a class they are well-to-do. The number of Vaishnav or Sáshtikar families is very small. They are chiefly found in the town of Vádi, and in the Vádi villages of Talavda, Hodavda, and Tulsali. They are traders, generally keeping grocers' shops. Bárdeshkars, also traders, are a very small class. A house or two

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Population.

Character.

Condition.

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Priests.

¹ Shenvis are either Smart or Varshnavs. The latter are also known as Sáshtikar

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Priests.

are to be found in the Vádi villages of Tulas and Bámbarda, in the Bánda villages of Ájgaon, Áraunda, and Talavda; and in the Kudál villages of Pinguli and Bibavna. Kudáldeshkars are found in the Pát and Haveli villages of Kudál, in the Ájgaon villages of Bánda, and in the Mángaon villages of Vádi. Most of them are husbandmen, very few are in Government employ. One family of Pednekars are hereditary headmen in the Bánda village of Sántarda. Except between Shenvis and Sáshtikars, marriage among the different classes is forbidden. Among the Shenvis and Sáshtikars caste disputes are settled by a caste committee, presided over by members of the two old and respectable families of Sabnis and Chitnis. Serious cases are referred to the spiritual heads, *svámis*, who live in Goa. Kudáldeshkars, Bárdeshkars, and Pednekars have caste committees of their own, who decide caste disputes.

Priests, state servants, traders, cultivators, and landholders, the Bráhmans are on the whole the most prosperous class in the state. Of their family expenses and style of living the following estimates have been framed. In honour of the birth of a son, Bráhmans spend from 2s. to £10 (Re. 1 - Rs. 100) on dinners and charity. These expenses are optional, and are seldom incurred in honour of the birth of a girl. On the occasion of putting on the sacred thread from 10s. to £50 (Rs. 5 - Rs. 500) are spent in clothes, religious ceremonies, charity, and caste feasts. Betrothal and marriage ceremonies are performed at the same time. The bridegroom's betrothal charges are entirely devoted to charity and religious observances, and rarely exceed £1 (Rs. 10). His marriage expenses range from £20 to £100 (Rs. 200 - Rs. 1000), three-fifths of the whole being spent in ornaments for the bride, and the rest, as the local phrase is, on such fly-away, *udán*, items as clothes, charity, caste feasts, fireworks, musicians, and dancers. The bride's father, under the name of a gift to the bridegroom, *varlakshaa*, pays the bridegroom's father from £5 to £100 (Rs. 50 - Rs. 1000). This dowry is invested in ornaments to be worn by the bride on her marriage day, and except under heavy pressure or family misfortune, the bridegroom's family cannot take them back. Besides this he has to spend more than three-fourths of what he gives as *varlakshaa*, in presenting clothes, cooking vessels, and food to the bridegroom and his relatives, as also in caste dinners, religious ceremonies, and charity. Of late the people have become alive to this drain of capital, and have grown more provident and careful than they used to be. The expenses on the occasion of a girl's reaching womanhood vary from 10s. to £20 (Rs. 5 - Rs. 200), one-half going in clothes and ornaments, and the other half in charity and in food and other presents. The only ceremony connected with pregnancy is that in the seventh or eighth month the woman's female friends and relations go to her house, each bringing a present of flowers and sweetmeats. Except a few shillings for the musicians there is no expenditure. Death charges, including religious ceremonies, charity, and gifts of clothes and food to relatives and friends, range from £1 to £50 (Rs. 10 - Rs. 500).

Writers.

Under Writers come Prabhus with a strength of nineteen souls. Descendants of men in British employ when the state came under

their management, they are outsiders from Ratnágiri and Thána. Since 1872 all the Prabhus, except one family, have left Sávantvádi.

Of Traders there are five classes, Vánis 9600, Lingáyats 508, Jains 199, Bogars 70, and Jangams 25, with a strength of 10,402 souls or 5·69 per cent of the Hindu population. Of these the Vánis, settlers from North Kánara about three hundred years ago, are found in the towns of Vádi, Bánda and Kudál, and in the villages of Mángaon, Ákeri, and Pavas. Of clean and neat habits, they are as a class sober, thrifty, hardworking, and well behaved. Their chief occupation is trade, selling piece goods and groceries. They eat animal food. Most of them are Shaivs, worshipping Shiv, Rám, Ganpati and Vithoba. Widows do not marry and they employ Bráhmaṇ priests. Caste disputes are settled by a mass meeting of the caste presided over by members of three or four leading families, who refer serious questions to Shankaráchárya Sváni. They have lately begun to educate their boys but do not seem to be a rising class. The Lingáyats, coming from above the Sahyádris some two hundred years ago, are distributed in the towns of Ákeri, Sálgaon, Válavál, Bámbuli, Nerur, Kudál, and Mát. Dissenters from the Jain religion, they have now become Shaivs, and some of them are professional idol worshippers in Hindu temples. The Bogars have sixteen houses, four at Vádi, four at Nanchi, two at Kudál, and six at Bordava and Varos. Originally from Belgaum and Kolhápur, some of them have, for more than fifty years, been settled in Vádi. They follow the Jain religion, but except that they never eat animal food, they are not very strict in its observance. They worship such gods as Gaupati, Krishna, Bhaváni, Khandoba, Bhairoba, and Jaitoba. They have a priest of their own caste who lives at Khárepátan and occasionally visits Sávantvádi. They dress like Maráthás and deal in brass and copper vessels, and glass bangles, hawking their wares in towns and villages and yearly fairs and sometimes opening stalls in markets. Caste disputes are referred by them to a deputy of their religious head, *svámi*, who lives at Khárepátan in Ratnágiri. Of late, where schools are available, they have begun to teach their boys.

Among traders, the store of clothes generally includes a rich turban worth from £1 to £2 10s. (Rs. 10 - Rs. 25), and lasting for five or six years; a loosely folded cotton scarf, *rumál*, worn on the head, worth about 6s. (Rs. 3); four waistcloths, *dhotars*, worth from 8s. to £2 (Rs. 4 - Rs. 20); three cotton or linen coats, *angarkhás*, worth about 8s. (Rs. 4); two under-jackets worth about 1s. (Rs. 2); two waistcoats of the value of 2s. (Rs. 1); two small waistcloths, *pañchás*, worth 3s. (Rs. 1-8); and several silken waistcloths worn while at meals or prayers, and varying in value from 10s. to £2 (Rs. 5 - Rs. 20), according as they are of inferior silk, *mugtás*, or of pure silk, *pitámbaras*. Besides these, for marriage and other special occasions, a very rich trader will have a cotton shoulder-cloth worth from about £1 to £20 (Rs. 10 - Rs. 200), and a woollen shawl worth from £5 to £10 (Rs. 50 - Rs. 100), and lasting with care for sixty years. A trader's wife's wardrobe includes two robes, *hugdis*, worth from £1 12s. to £2 (Rs. 16 - Rs. 20), four bodices each worth

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Hindus.

Traders.

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Traders.

6s. (Rs. 3), a cotton scarf and woollen shawl worn over the head on marriage and other great occasions, and if she is a Bráhmaṇ, a silk robe for dining and praying in. The monthly food charges of a well-to-do trader, his wife, and two children, amount to about £2 (Rs. 20). Those in middling circumstances, doing without vegetables, mutton, milk and clarified butter, and using less oil and betelnut and leaves, spend about £1 4s. (Rs. 12); and the poor, living on such coarse grains as *núchni* and *cari*, do not spend more than 8s. (Rs. 4). Besides a clerk, *kárkun*, paid from 12s. to 16s. (Rs. 6-Rs. 8) a month, a well-to-do trader has two servants to help him in his business, and one for the shop paid about 6s. (Rs. 3) a month, sometimes in cash and grain, and sometimes in cash only. For household work he keeps a female servant who receives one and a half pounds (1 *sher*) of rice a day, and once a year a robe, *bugda*, worth about 6s. (Rs. 3). If he owns cattle, he has a cowherd, *rákhan*, who, besides food, has a monthly allowance of 1s. to 1s. 6d. (*annas* 8-*annas* 12), and once a year gets a blanket, *kímli*, a pair of native shoes, *champals*, and a waistcloth worth about 6d. (*annas* 4). A small trader has only one female and one male servant each paid about 6s. (Rs. 3) a month; and a poor trader has no servant at all. They open their shops about seven and stay in them till noon, when they take their midday meal and sleep till two. After two they re-open their shops, and serve in them till eight.

Husbandmen.

Under Husbandmen come three classes with a strength of 127,370 souls or 69·71 per cent of the whole Hindu population. Of these 105,000 were Maráthás, 19,750 Bhandáris, and 2620 Devlis. The Maráthás, some of whom are soldiers as well as cultivators, are fairly well off.¹ The Bhandáris are poor, some of them in service and some employed as toddy drawers. Devlis, the descendants of Bhávis or temple prostitutes, besides cultivating, perform some temple service.

The husbandman's common food is a little boiled rice, cakes of *núchni* and *cari*, fish, and some vegetables. The monthly food charges of a family of five persons varies from 12s. to 16s. (Rs. 6-Rs. 8). For burden and field purposes they have bullocks and buffaloes, each of the former worth about £1 10s. (Rs. 15) and of the latter about £2 (Rs. 20). Their keep costs very little, as when not left to graze, they are fed with cut grass only. A large landowner has a servant for field work paid about 2s. (Rs. 1) a month, besides his daily food. In busy seasons he hires about ten male and twenty or twenty-five female servants, *kámeris*, each of the men getting his daily food, and at the end of the season $\frac{1}{2}$ of a ton of unhusked rice, and each of the women six pounds of unhusked rice a day. A less prosperous farmer has one permanent servant, and in the busy season two or three extra workmen. A small landholder works with his own hands, and is helped by his wife and sometimes by his neighbour. Among the poorer husbandmen it is a general practice to plough with a joint, *várangula*, pair of bullocks, that is with one bullock of their own and one of their neighbour's. Rising very early in the morning, and eating some *núchni* bread and

¹ All Marathas following agriculture are called Kunbis.

gruel, the husbandman goes to his field and works till noon. If his house is far off his wife brings him the midday meal, and if work is not pressing, they rest an hour or two and then work till evening, when they return home to sup and go to bed about nine.

Of Craftsmen there are nine classes with a strength of 11,330 souls or 6·20 per cent of the whole Hindu population. Of these 2100 were Mithgávdás, saltmakers; 175 were Koshtis, weavers, found only in the villages of Tulas and Kasál; 1380 Telis, oilmen; 1210 Sonárs, goldsmiths; 2100 Kumbhárs, potters; 475 Dhavads, blacksmiths; 3760 Sútárs, carpenters; 30 Shimpis, tailors; and 100 Chitáris, painters. Rising early in the morning they are soon at work and keep working till noon. After a meal and a two hours' rest they begin again and continue till the evening, when after supper they go early to bed. All except the goldsmith are poor, and most of the saltmakers, oilmen, and weavers, and some carpenters and potters eke out their earnings by field work. Getting little help from their wives and children they carry on their work on the humblest scale with no stock in hand, and making articles only when ordered. The estimated monthly charges of a family of four persons, a man, his wife and two children, are, for a goldsmith, about £1 10s. (Rs. 15); for a carpenter from 16s. to £1 (Rs. 8-Rs. 10); and for a mason from 10s. to 12s. (Rs. 5-Rs. 6).

Of Bards and Actors there are two classes with a strength of 220 souls or 0·12 per cent of the whole Hindu population. Of these 170 were Gáns and fifty Vájantris. The Gáns are well off. The men play the fiddle, *sárangí*, and the drum, *tabla*, and the women, *kalávants*, act as singing and dancing girls. The Vájantris, belonging to the Ghadsí caste, are inferior both to Gáns and Maráthás. Coming originally from above the Sahyádris they have about five houses chiefly in the town of Vádi. With idle and unclean habits they are poor and given to liquor drinking. They eat meat, and their ordinary food is rice, curry and fish. They have a caste meeting which decides all disputes. Both at Hindu and Musáلمان weddings the shrill music of their flutes, *sanaís* and *surs*, is indispensable.

Of Personal Servants there are three classes with a strength of 3200 souls or 1·75 per cent of the whole Hindu population. Of these 1900 were Nhávis, barbers; 1225 Parits, washermen; and 75 Mashálchis, torch-bearers. They are all poor.

Of Shepherds there are two classes with a strength of 1940 souls or 1·06 per cent of the whole Hindu population. Of these 1750 were Dhangars, shepherds, who own cattle and goats, and move from place to place; and 190 Gavlis, milkmen, new comers from Kolhápúr, who are settled in villages and towns. Both these classes are poor.

Of Fishers and Sailors there are two classes with a total strength of 1125 souls or per 0·61 cent of the whole Hindu population. Of these 850 were Gábíts, and 275 were Bhois, palanquin-bearers, some of whom eke out their living by tillage.

Of Leather Workers there are two classes with a strength of 1765 souls or per 0·96 cent of the whole Hindu population. Of these 1625 were Chámabhárs, tanners and leather workers, and 140 were

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Hindus.

Craftsmen.

*Bards and
Actors.*

Servants.

Shepherds.

Fishers.

*Leather
Workers.*

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Depressed Classes.

Berads.

Jingars, saddlers, some of whom prepare finely embroidered leather work.

Of Depressed Classes there are two with a strength of 9854 souls or 5.28 per cent of the whole Hindu population. Of these 104 were Berads and 9750 Mhars.

BERADS, found only in the village of Chankuli in the Sahyádris, have caste-fellows scattered over the neighbouring Belgaum villages. According to their own story they are of the same caste and creed as the Rámoshis, with whom they eat, but do not intermarry. A comparatively well-to-do Berad has a house with three rooms, the back room for cattle, the middle for the women and for dining, and a front room for the use of the men. Except two or three brass and several earthen vessels, worth about 6s. (Rs. 3), they have few household goods. For a man, his wife, and two children the entire wardrobe is worth about 14s. (Rs. 7), of which about 7s. (Rs. 3-8) is the worth of the man's, 5s. (Rs. 2-8) of the woman's, and 2s. (Re. 1) of the children's clothes. All women, both rich and poor, wear a neck ornament,¹ *galsari*, worth about a shilling (8 annas). Their food, coarse grain with occasionally a fowl and the flesh of sheep, goats, buffaloes, and cows, costs from 8s. to 10s. (Rs. 4 - Rs. 5) a month. Some of them are very badly off, living in a one-roomed hut, eating roots and leaves with grain only occasionally, and with difficulty earning 2s. (Re. 1) a month. They are a quiet harmless people, with the help of their wives growing rice, *náchni*, and *vari*, and little inclined to leave their villages in search of work.²

They worship their ancestors, but keep no images in their houses. Their favourite god is Ganpati. Like other Hindus they fast on the 11th *Kártik Shuddh* (November-December) and 11th *Íshádih Shuddh* (June-July), and feast on the *Nág Panchami* (July-August), *Ganesh Chaturthi* (August-September), *Dasra* (October-November), *Díváli* (October-November), and *Holi* (March-April). They have no special fasts and festivals. They worship the cobra, *nág*, holding it sacred and never destroying it. Except two shrines, *charáthús*, at Chankuli, the one called *náikoras* and the other *kerkoras*, they have no special places of pilgrimage. They never visit Musalmán saints' tombs, and no saints, *sáulhus*, of their tribe are worshipped by other Hindus. They have no priests of their own. The village Bráhmaṇ, *bhot*,³ performs all religious ceremonies connected with birth, marriage, and death. They have no ceremonies at naming. When a son is born, they wait on the *bhot* and pay him a copper pice. He asks the father the names of his ancestors, and after consulting a paper tells him what to call his child. There are no ceremonies at betrothal or puberty. As the Berad community in a village is more or less connected by blood, brides are sought in the neighbouring Belgaum

¹ All women, except widows, wear their lucky thread, *mangalsutra*, as a pendant to this ornament.

² The assessment of lands held by them at Chankuli amounts to about £7 10s. (Rs. 75).

³ The *bhot* never enters a Berad's house, but eats of the food provided for him at a little distance. On the marriage day he enters the booth, *mandra*, and performs the ceremonies. At the consecration of a house, though he officiates, he never sprinkles water, but asks the master of the house to sprinkle it.

villages. The marrying age for girls varies from five to ten, and for boys from ten to twenty. When his first wife is barren, a man may take a second or even a third wife. But if he has children by his first wife, he seldom marries a second wife in the lifetime of the first. There is a caste rule that if a man suspects his wife of unfaithfulness, he may bring the matter before a caste meeting at Vāgotar, and if the caste committee find the woman guilty he may marry another wife. But divorce on the ground of adultery is almost unknown. Widow marriage is allowed, but a widow falls in public esteem by marrying a second time. The Berads never intermarry with any other caste or tribe. The marriage charges in a well-to-do family are, for the bridegroom, a sum of £2 6s. (Rs. 23) to be paid to the bride's father, and about 6s. or 8s. (Rs. 3 - Rs. 4) more for caste feasts. For the bride's father the cost is about £1 (Rs. 10), of which 2s. (Re. 1) go to buy a turban for the bridegroom and the rest is spent in caste feasts. Caste dinners are given on marriage and death occasions, and on the fifth day after the birth of a child. On all occasions the food is mutton and rice, prepared by the women of the host's family and served in earthen vessels and eaten off stitched leaf plates. In marriage feasts the men and boys eat first, and then the women and girls. At their feasts there is no wine, and no singing or dancing. The Berads bury the dead. Nothing is spent on the burial of children and unmarried persons. In the case of an adult, the death charges for grave clothes and a feast to the mourners amount, in a well-to-do family, to about 10s. (Rs. 5). They have an hereditary headman, *gārdā*, the oldest male in a certain family at Chaunkuli. He settles all petty caste disputes and transfers the more serious to the caste meeting at Vāgotar, where he brings the parties and helps to dispose of the matter. Should the parties be dissatisfied with this award, the village headman is called in and his judgment is final. The person against whom the decision is given is required to pay the caste a fine proportionate to his means. Marriage with a Mhār is punished by expulsion from caste, and a woman of bad character may be excommunicated. The village Brāhman, *bhat*, is never consulted in such matters. The social position of the Berads is said, perhaps because they are now much quieter and better behaved, to have of late considerably improved. They rank themselves under Musalmāns, but much above Mhārs, never touching or mixing with them. They have no liking either for games of chance or athletic exercises, and except at *Dasra* (October-November), when they collect outside of the temples to hear old stories, *kathās*, they care little for listening to tales or music. Partly from bad seasons, but mostly owing to their extravagance on marriage occasions, about two-thirds of the Chaunkuli Berads are sunk in debt. The advances they require are generally repaid after six months at twenty-five per cent interest.

MHĀRS,¹ with a strength of 9750 souls, are of two sub-divisions, Pan Mhārs and Bele Mhārs, who neither eat together nor

Chapter III.

Population.

Depressed

Classes.

Berads.

Mhars.

¹ The Mhar and Nāth Gosavi accounts have been compiled from materials supplied by Mr. Hari Bhikkaji Vagle, Head Master Anglo-Vernacular School, Śāvāntvādī.

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Population.

Depressed
Classes.*Mhārs*

intermarry. In every village a separate quarter called *Mhārvāda*, generally on the outskirts, is set apart for the *Mhārs'* dwellings. These are small huts, thatched or tiled according to the owner's means, and divided into one, two or three rooms. Mats, sleeping and sitting boards, a few earthen and brass or copper vessels, a tobacco pipe, a billhook or axe, and if he is a cultivator, a plough and other field tools form the chief part of a *Mhār's* household gear. A *Mhār* dresses like a *Marātha* in a loincloth, waistcloth, and headscarf. The food charges are nearly the same as those of a *Berad*. As village servants they hold allotments of village lands. Some serve as guides and messengers, some enlist in the native regiments of the British army, and others serve as grooms and day-labourers at from 3*d.* to 4½*d.* (*annas* 2 - *annas* 3) a day. The women are skilled in cane and bamboo plaiting, and in making umbrellas from the leaves of the *bondyji*, *Pandanus odoratissimus*. As a class they are quiet and hardworking. Marriage and other ceremonies are performed by a priest, *guru*, of their own caste. Unlike the *Berads*, *Mhārs* do not worship their ancestors, but have deities in the shape of cocoanuts or betelnuts, called *Brāhmans* and *Purvas*, whom they worship on every Monday, applying sandalwood powder, burning incense, and offering flowers. In every village, close to the chief temples, there is a *Mhār* shrine where they worship a stone idol of *Talakhba*. They sometimes visit the Hindu temples at *Pandharpur*, but never a *Musalman* saint's tomb. There is no local *Mhār* saint, *sādhu*, who is worshipped by other Hindus. The marrying age, the marriage and death charges, and the caste dinners, except that women and children eat at the same time as men but in a different place, and that men freely indulge in country liquor, are nearly the same as those of the *Berads*. They do not marry outside of their own caste, and re-marriage and polygamy are allowed only when the first wife is barren or faithless.

They have no recognised headman, but the *Mhārs* of certain villages have for generations been regarded as arbitrators in settling caste and other disputes. Taking food in the house of a saddler *Jingar*, a painter *Chitāri*, or a *Musalman*, and adultery are punished by expulsion from caste. They have no games of chance or skill, and seldom practise any athletic exercises. Their great delight is to listen to the stories recited in temples by their priests, *gurus*, whom they also call *Harājis* or servants of Krishna. Want of care and forethought has sunk most of them deep in debt to the landholders and village accountants, *kulkarnis*. Still, within the last forty years their state has greatly improved. They have tiled cottages instead of thatched huts, brass and copper vessels instead of earthen pots and cocoanut shells, clothes instead of rags, and good wholesome food instead of scanty pickings.

Beggars.

Of Religious Beggars there are five classes with a strength of 2033 souls or 1·11 per cent of the whole Hindu population. Of these 23 were *Bhārathi Gosāvis*; 960 were *Nāth Gosāvis*, some of them husbandmen; 100 were *Bhāts*; 800 were *Thākurs*; and 150 were *Votāri Gosāvis* who appear to be new comers, some of whom prepare and deal in stone pots.

NĀTH GOSĀVIS,¹ numbering 960 and probably of Marāṭha origin², are dark, beardless, and of middle stature, with nothing to mark them from ordinary peasants. They are found in the villages of Kankavli Ashāmat and Kāmta in Ratnāgiri, at Ajra in Ichalkaranji, at Goa, and at Mālvān. They seldom own houses. Their brick-coloured, *bhagva*, dress consists of a loincloth, a cap, a blanket, and a waistcloth. From their left arm hangs a wallet, and when they go begging, they carry a stick in the right hand and a pale-coloured gourd in the left. The ornaments worn by the men are a silver chain, *gop*, silver armlets, *kadīs*, and silver or pewter earrings, *mudrās*, the distinguishing mark of their sect. The women's dress is in no way peculiar. A well-to-do woman's ornaments include a gold nose-ring, a necklace of glass and metal beads with a small central gold brooch, *galsari*, and three sorts of earrings, *budīs*, *bālis*, and *kāps*. They understand ordinary Marāṭhi, but among themselves use a peculiar *patois*. Worshipping the ordinary Hindu gods, particularly the gold or silver image of Rānubāi, and employing Brāhman priests, they believe in witchcraft and spirits, tying amulets to their children's arms, and sacrificing fowls to propitiate male demons, *derchūrs*. Some of them are settled, but most are wanderers stopping in village temples in the rainy, and camping under trees in the fair, seasons. They generally stay within Śāvantvādi limits, but sometimes pass to the neighbouring districts and to Kolhāpur. They move in bands or families of from twelve to fourteen men, and sometimes take with them a bull, and one or two goats and dogs. Among those who are settled, some take to fishing, but most make vessels, *dagulia*, from the stone of the Rāmgad quarry, and the women sell very popular glass-bead necklaces, *pirlukās*.³

The child is named on the twelfth day after birth. On the fifth, the goddess Rānubāi is worshipped, rice and fish are offered, and the caste people feasted. The next ceremony is ear-slitting, by which a man publicly assumes his calling, and becomes eligible for marriage. The ceremony is performed by a priest, *guru*, belonging to the Dorevike Gosāvi sect, who fixes a trident,¹ *trishul*, in the ground, and after worshipping it and offering it a hen, with a sharp knife pierces the lobes of the young disciple's ears. The blood is allowed to fall on the ground while the disciple repeats the words, '*Shri Gorakh, Shri Gorakh*'. A wallet with a pot in it is tied to his left arm, and the priest enjoins him henceforth to live solely by begging. He starts at once on his new calling, collecting from the guests plantains, dates, and cocoanuts. The ceremony ends with a dinner. They marry at a very early age. On betrothal, the father of the bridegroom invites the bride's father and their friends to a dinner. The intended marriage is declared, sugar and betelnuts are distributed among the guests, and the bride's father is presented with

Chapter III.

Population.

Beggars.

Nāth Gosavis.

¹ Closely allied to the Nāth Gosāvis, but differing from them in caste and ceremonies, are the Gorakhs, who are also called Kānphatas or slit-ears from having their ear lobes slit.

² Among their family surnames are Patel, Jadhav, Shirke, Todkar, Lād, and Rajput.

³ This necklace is a sign that the wearer is married and unwidowed.

⁴ An emblem of Shīva, as both of these sects are Shaivs.

Chapter III.**Population.****Beggars.***Nath Gosavis.*

a sum of £4 (Rs. 40), called *dej*. On a lucky day fixed by a priest, the female relations of the bridegroom carry a piece of cotton cloth and turmeric to the bride's house, and rub her all over with it. Then the women of the bride's family bringing turmeric apply it to the bridegroom. The bridegroom then repairs to the bride's house and the marriage is performed by a priest, the ceremony ending with a feast to the son-in-law. The pair then proceed to the bridegroom's house where a feast is given to the bride's family. Consummation of marriage, *phale-shobhan*, takes place when the girl reaches womanhood.

When a man dies, his body is washed with hot water, and if he has left a widow, a black dentifrice, *dántrán*, is rubbed on his teeth, and betel leaves and nuts are placed in his mouth. The body is carried to the grave sitting, and in that position is buried. On the third day the corpse-bearers are feasted, and on the eleventh, when the mourning ceases, they are purified by drinking a mixture of the five products, *pañchagavya*, of the cow, urine, milk, butter, whey and dung. On the twelfth two goats are sacrificed, and a small cloth is spread with pieces of bread, plantains, rice, and molasses; bits of boiled flesh are laid at the corners, and in the centre a burning wheat-flour lamp is set with a small water vessel, and on each side a bunch of *rai*, *Calotropis gigantea*, flowers. The day ends with a feast. On the morning of the thirteenth the ceremonies are brought to a close, the chief mourner throwing the offerings into water and presenting each of the caste people with a pipe of tobacco. The caste headship is confined to certain families and is hereditary. The heads settle all caste disputes with the aid of the other leading men. At caste gatherings they are first served with the hubble-bubble, *gadgadli*, and betel leaves and nuts, and at marriages they receive a small sum of money. Of late the Gosavis are said to have greatly improved, giving up their untidy drunken habits and beginning to settle as husbandmen.

Thakurs.

Coming from above the Sahyádris some four hundred years ago, Thákurs number about 800 souls. They are found chiefly in the Kudal villages of Ambadpal and Mudla. Inferior in rank to Marathas they are idle and of unclean habits. Though some of them till and twist woollen threads for blankets, they live chiefly on begging and ballad-singing. At times they perform plays representing events mentioned in the *Puráns* and *Itimáyan*, and showing wooden puppets moved by strings. They keep dogs and have no scruple in eating animal food. Widow marriage is allowed, and all religious ceremonies are performed by a priest of their own caste. Caste disputes are settled by their own headmen.

Musalmanas

Musalmanas, numbering in all 1152 souls or 2·18 per cent of the whole population, have four sub-divisions, Shaukhs, Syeds, Moghals, and Patháns. All of them are Sunnis, and according to their own account are of foreign origin. Most of them are employed in the Sávantvádi Local Corps; the rest are traders, husbandmen, groomers, water-carriers, and drum-beaters. As a class they are poor, idle, and improvident.

In 1872, the Christians had a strength of 3954 souls. The descendants of natives converted by the Portuguese, most of them are found in the south of the district. They are not settled in separate villages, but scattered about chiefly as masons and palm-juice drawers. The males have a head scarf, a shoulder cloth thrown loosely over the body, and a waistcloth girt round the loins. Except that it is somewhat costlier, their church dress is the same. The women wear robes and bodices, and in church, above their robe, a white cloth with one end drawn over the head. As a class they are poor. They differ from other middle class natives chiefly by eating pork.

According to the 1872 census, there were 221 towns and villages or about one village to every four square miles, containing an average of 840 inhabitants and about 197 houses. Of the 221 villages, 36 had less than 200 inhabitants; 57 from 200 to 500; 64 from 500 to 1000; 41 from 1000 to 2000; 18 from 2000 to 3000; four from 3000 to 5000; and one, Vadi, over 8000.

None of the villages are walled; none of them are settlements of aboriginal tribes; and in none of them do all the villagers belong to the same caste. Except at Ámboli, where caste and other petty disputes are settled by committees, *pancháyats*, the settlement of village quarrels is in the hands of the village headman. The village establishment includes the village headman, *gávkar*, the police officer, *fanjldár*, the village accountant, *kulkarni*, the banker, *potldár*, and village servants, called *ghúdis*, *devlis*, *bhávincs*, and *mhárs*. The village headman, *gávkar*, chosen in some villages from the Marátha, in others from the Bhandári, and in a few from the Gaud Bráhmán, castes, is the hereditary village headman and revenue collector. He was formerly consulted on every occasion. And though he has of late lost some of his influence, he has still a special position of honour at the celebration of village ceremonies, at fairs, and at such holidays as *Holi*, *Rámnavmí*, and *Dasra*.¹ Generally badly off, he never lends money, nor helps money-lenders in recovering their dues from his villagers, nor acts as a mediator between debtors and creditors. He is not expected to feast the whole village. But on marriage occasions, if his means allow, he sometimes asks most of the villagers and feasts them for one or two days, Brahmans getting uncooked food, and low caste villagers eating by themselves.

The practice of having a village police officer, *fanjldár*, dates from 1835. He generally belongs to the same caste as the headman, and in most cases is chosen from the same family. The accountants, *kulkarnis*, keep the village papers, and are associated with the headmen in all village revenue matters. Except in the village of Tulas, there is no office of banker, *potldár*. The servants, *ghúdis*, *devlis*, *bhávincs*, and *mhárs*, receive from the people an allowance of grain and garden produce. They are required to help the headman and the police officer in gathering the revenue and in other village matters. Among Hindus there are no religious village officers. On minor points the

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Population.

Christians.

Villages.

Communities.

¹ His authority in this respect is called *purra-satta* as opposed to his authority in revenue matters called *raj-satta*.

Chapter III.**Population.****Communities.**

people consult a learned Bráhmán of their village, and on important points their town priests. The Musalmáns consult the Kázi or his deputy. Of craftsmen, carpenters alone have any claim on the villagers.¹ Their claim consists of forty-eight pounds (4 *kudars*) of grain on each pair of bullocks, and in return for this they make ploughs and other field tools.

No lands are set apart as village pasture grounds. The villagers graze their cattle on their own fields, or on neighbouring hill and waste lands. All villagers are without charge allowed to bring dry faggots and firewood from the village and state hill lands and forests. When the forest lands of two villages join, the landholders of both divide the produce among them. In most villages some of the people are known to be later comers than the rest, but the difference does not seem to have any effect on their rights and position as villagers. Ponds, temples, and other works of general use are carried out by the villagers' contributions in money and labour. To water their fields all have an equal right to the water of the village pond. But if the pond is kept for drinking, the depressed classes are not allowed to draw water from it.

Movements.

Between 1851 and 1861 a large number of husbandmen, chiefly Maráthás and Bhandáris, went as labourers to the Mauritius. Most of them returned after saving from £20 to £40 (Rs. 200 - Rs. 400). One of them, a Váui who had learned some French, after about twelve years' service, brought back a fortune of £100 (Rs. 4000). Since 1861, by the rise of local and Bombay wages and by the decline in the demand from the Mauritius, emigration has ceased. Though the people are poor, it is estimated that not more than three in a thousand leave Sávantvádi in search of work. Some of these, belonging to the upper classes, go to Bombay and other large towns in the hope of finding employment as clerks in Government and mercantile offices. They generally leave their families behind, and if they succeed in finding employment, return after a time and take them away. A second body, chiefly Maráthás and Mhárs, getting service in the native army and in the police, generally take their families with them. They visit their native villages from time to time, and generally settle there when they have earned a pension. The third class are labourers, who in October, after the harvest is over, move to Bombay or other labour markets, and working there as carriers during the fair season, go back to their villages in the beginning of June before the rains set in. Within the limits of the state there is a certain amount of movement among the cultivating and labouring classes, whose time is divided between the growth of the coarser grains in hill lands and of rice near the coast. As there is little waste land, and nothing either in the trade or the industries of the state to attract capital or labour, there is no immigration.

¹ These claims are known by the name of *adav*.

CHAPTER IV.

AGRICULTURE.

AGRICULTURE supports about 127,370 souls, or sixty-nine per cent of the whole population.

The soil is chiefly a light sand full of stones and gravel and unable to yield the better class of crops.

Until the revenue survey is finished the area of land under tillage cannot be exactly known. It may (1878) be put down approximately at 355,000 acres. Near the village of Áraunda is a tract of reclaimable land, but to fit it for cultivation would cost more than the probable return appears to warrant. Poor uplands and hill slopes, known as *varkas*, are allowed to lie fallow from three to ten years. Two or three crops are then grown, and for a term of years the land is again left fallow.

During the rains rice lands are watered by mountain streams, and in the dry season, fields are watered by lifts from brooks, wells and ponds. The water from the brooks is carried through fields and gardens by narrow water-courses. The water of the wells and ponds is drawn by a lever lift, *lât*, worked by a single man, the bucket emptying into a channel at the mouth of the well.

The average plough of land varies from three to four acres. The steps taken to prepare the ground for sowing the wet weather, *sharad*, crop vary greatly in different soils. Moist, *shel*, lands are broken up with the plough as early as December, and between December and April when sowing begins, are re-ploughed nine or ten times. In the drier lands the ploughing does not begin till April or May. The soil is then harrowed, manured by burning tree branches, and again harrowed.

For a peasant, land paying from £15 to £20 (Rs. 150 - Rs. 200) a year is considered a large holding; from £2 10s. to £5 (Rs. 25 - Rs. 50) a middle sized holding; and from 6*d.* to £2 10s. (*annas* 4 - Rs. 25) a small holding. A man with four acres of rice land and one acre of hill land, *bharad*, yielding three tons (7 *bharás*) of produce valued at £11 4s. (Rs. 112), is better off than a man drawing 16s. (Rs. 8) a month. A pair of oxen can till from two to three acres of land yielding about 1½ tons (4 *bharás*) of grain worth about £6 8s. (Rs. 64).

The husbandman's live stock generally includes bullocks valued at from £1 10s. to £4 (Rs. 15 - Rs. 40); buffaloes worth from £1 to £5 (Rs. 10 - Rs. 50); cows worth from £1 to £3 (Rs. 10 - Rs. 30); and goats worth from 1s. to 4s. (*annas* 8 - Rs. 2). The field tools

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are the plough, axe, spade, billhook, crowbar, and harrow. The amount of capital represented by the tools and cattle is about £5 (Rs. 50).

Crops.

There are two seasons for sowing, and the crops are distinguished as the dry weather, *gimvas* or *vāngan*, and the wet weather, *pārsāli*. The dry weather crops are sown in November and December, and harvested in March and April. These crops are grown only on marshy land watered from rivers. They are rice, *bhāt*, *Oryza sativa*; *nāchni*, Eleusine corocana; *kulith*, *Dolichos uniflorus*; *udid*, *Phaseolus mungo*; *mug*, *Phaseolus radiatus*; *charli*, *Dolichos sinensis*; *pāvta*, *Dolichos lablab*; and *tur*, *Cajanus indicus*. The wet weather crops, sown in June and July, are reaped in September, October, and November. They are rice, *vāri*, *Panicum miliare*, *nāchni*, *udid*, *sāva*, *harik*, *kulith*, *mug*, and *tur*. The staple grain crop, representing about one-half of the whole tillage area, is rice. The remaining fifty per cent is divided among fourteen different kinds of produce. The chief of the commoner grains, and the proportion they bear to the entire tillage, are *nāchni* or *nāgli*, Eleusine corocana, 12·50 per cent; *harik*, *Paspalum frumentaceum*, 9·37 per cent; *kulith*, *Dolichos uniflorus*, 6·25 per cent; *vāri*, *Panicum miliare*, 6·25 per cent; *udid*, *Phaseolus mungo*, 3·13 per cent; *mug*, *Phaseolus radiatus*, 3·13 per cent; *sāva*, *Panicum miliaceum*, 3·13 per cent; other crops, as *tīl* *Sesamum indicum*, *charli* *Dolichos sinensis*, *kāng* *Panicum italicum*, *vāla* *Panicum pilosum*, *tur* *Cajanus indicus*, *us* *Saccharum officinarum*, *pāvta*, coffee *bud*, pepper *mīri*, and hemp, 8 per cent.

Rice.

Rice, *Oryza sativa*, holds the first place with about fifty per cent of the whole tillage area. For the wet weather crop, in June, after a few showers, the field, if in high moist soil, is sown with rice and ploughed. The plants shoot up after a few heavy falls of rain. They are then allowed to grow for a month, and when the soil has become soft, they are pulled up in bunches and planted eight or ten inches apart, in land previously ploughed and cleared of grass. In some villages the seed is sown in nurseries, and when ready to set out, the young plants are in due time carried two or three miles. The field is afterwards weeded from time to time, till, in October or November, the crop is ready for cutting. After being cut it is spread out to dry.¹ It is then tied in sheaves, after a month thrashed by beating the sheaves against a well cleaned threshing floor, and finally winnowed. If the soil can bear a second crop, it is again prepared in November, and the same course of labour is gone through. The soil does not require a second manuring nor are the clods of earth broken after ploughing. One crop in the best, *shel*, rice lands, which are never used for a second crop, yields from $\frac{2}{3}$ tons to $1\frac{1}{4}$ tons (8-10 *khandis*) the acre; and the second sort from $\frac{1}{4}$ ths to $\frac{3}{4}$ of

¹ The names of rice in the various stages of its growth are, (1) *bi*, seed; (2) *cor*, the early green shoots; (3) *tarra*, when ready for transplanting; (4) *posarbi*, when seed pods begin to form; (5) *dudhyle*, when the seed has a milky consistency; and (6) *bhāt*, when it is ready to be gathered in.

a ton (6-7 *khandis*). Rice¹ is of two kinds, coarse *ukde*, and fine *surai*. Before separating the seed from the husk, coarse rice is first boiled a little and then dried, a process which fine rice does not require.

Náchni,² Eleusine corocana, holding the second place with 12·50 per cent of the tillage area, is sown on the hill slopes. The husbandmen visit the hill lands in April and cut down the trees to be used as manure. They then go home, and returning in May burn the cut branches and trees, and while the ashes are still warm, sow the seed. They are back again in June to cut off the shoots that have sprouted from the roots of the trees that were cut down, and then going home again return in July to weed. In September another visit is paid to lop off any fresh shoots that may have sprouted from the stumps. Then, after the rice harvest is over, they come back to the hill lands in November and house their crop.³ With all this trouble the hill harvest does not yield each man more than $\frac{3}{8}$ of a ton (one *khandi*) worth about 8s. (Rs. 4).

In 1878-79 there were about 30,000 coffee plants in the Táboli estate four miles south-east of Vádi.⁴ About half of them were raised from seed brought from Curg. Siberian coffee seed was tried but without success. The site of the garden is not high enough, and the rainfall not well enough distributed for the successful growth of coffee. The cost has been a good deal more than the proceeds. In 1878-79, the expenditure was £274 (Rs. 27·40) and the returns £133 (Rs. 13·30). In 1879, an experiment in coffee tillage was made on the spurs of the Sahyádris. The ground is well suited for coffee. But the want of rain, in all but a few months in the year, forms a great, if not an un-surmountable, bar to its successful growth.

Manilla hemp grows abundantly in the Sahyádris during the rainy season. More than 4000 plants were introduced into the Táboli estate. In 1876 a newly invented fibre-cleaning machine brought from New Zealand, was successfully worked on the aloe leaf, but was believed to have injured the health of the men who worked it. An attempt to use it in extracting Manilla hemp fibre failed.

The only two years of scarcity of which record remains were 1791 and 1821. In 1791-92, a drought, coming on the top of the plunder of the country by the Kolhápur chief, caused such scarcity that rice

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Crops.

Náchni.

Coffee.

Hemp.

Bad Seasons,
1791-1829.

¹ Of thirty varieties of rice, seven are of the better and twenty-three of the poorer sort. The seven better sorts of rice are, *kothambira*, *khirsal*, *gajel*, *tarsal*, *patni*, *catsal*, and *sil*; the twenty-three inferior are, *archat*, *kalinawan*, *kalabala*, *kalakadaga*, *kedal*, *khochri*, *chimsal*, *tapkala*, *dangra*, *dangre*, *tambikudaga*, *naran*, *bihaval*, *bela*, *madga*, *parangal*, *raksal*, *valga*, *shardi*, *sawane*, *sukal*, *sorti*, and *souphal*.

² There are eight varieties of *náchni*, *kira*, *kharemathle*, *dangre*, *dullmogre*, *paranphutane*, *midle*, *dhovi*, and *shendre*.

³ The cultivation of *náchni* during the rainy season on the Sahyádris slopes is called hillbreaking, *dangre todut*. *Náchni* is also grown on the plains in the fair season. This kind of tillage, known as *bhara*, yields so small a surplus that it is very seldom resorted to.

⁴ This estate was, in 1867 bought by the Savantvádi state from the widow of Mr. Spencer, Assistant Surgeon.

Chapter IV. Agriculture.

Bad Seasons.
1821-22.

was sold at from three to $7\frac{1}{2}$ pounds for 2s. $3\frac{1}{2}$ d. (two to five *shers* the *pirkháni* rupee),¹ *náchni* at twelve pounds, and *javári* and *udid* at $13\frac{1}{2}$ pounds. To relieve the distress, the Vádi chief waylaid rice ships and doled out their cargoes. In 1821-22, a sudden and unusual fall of rain destroyed the grain, and a storm that accompanied it ruined the garden crops. Rice rose to seven pounds the rupee. The chief opened the state granary, *kothi*, and distributed supplies.

The state is liable to floods caused by the rapid filling and overflowing of its mountain streams. The damage done is never on any very large scale. Within the present generation there have been no serious droughts. During the last twenty-five years, with an average yearly rainfall of 130 to 135 inches, the nearest approach to a drought was in 1864, when the rainfall amounted to only 96 inches. In 1875 and 1876, the state suffered from a scarcity of hill and garden produce, caused not by a deficiency in the rainfall, but by its abruptly ceasing in September instead of going on till October. In 1876, in a portion of the Bánda sub-division, there was a failure of the hot weather, *váingan*, crops. But in no instance was the failure so great as to call for remissions, though in some places the dates for levying the revenue instalments were postponed. In 1877-78, the delay of the break of the rains till the middle of July caused a short rice harvest, and the scarcity of grain was increased by exports to the Deccan and Southern Marátha districts, and by the arrival of immigrants from the famine-stricken parts of the country. Locusts are very seldom heard of in Sávantvádi. Some swarms appeared but did no harm in 1865, and in 1879, in eighteen villages close to the Sahyádris, they destroyed crops worth about £600 (Rs. 6000).

Cultivators.

The chief cultivating classes are, Gaud Bráhmans with a total strength roughly estimated at 2000 souls, Maráthás with a strength of about 53,000, Bhandáris with 10,000, native Christians with 1000, Musalmáns with 2000, and other castes with 3000. Maráthás are found all over the district; Gaud Bráhmans chiefly in Pát, Válavál, Tendoli, Nerur, Pinguli, Jháráp, and Sálgaon; Bhandáris in the Sántarda and Ájgaon sub-divisions of Bánda and in Talavda of Vádi; native Christians in Májgaon, Insuli, Charatha, and other Bánda villages; Musalmáns in Jháráp, Mángaon, Náneli, Kolgaon, Bándá, and Kudál; and other castes, such as Vánis, Sutárs, Sonárs, Devlis, Nhávis, Gosávis, and Mhárs, over almost all the state. Gaud Bráhmans and others of the better class of cultivators generally live in one-storied mud houses, with tiled roofs and five or six rooms, in orchards of cocoa, jack, and mango trees. The houses of the poorer peasants, with only two or three rooms, are thatched with dry grass and palm leaves plaited or plain. Gaud Bráhmans and a very few others have metal pots, the rest have only clay pots; and these with their stock of field tools, a pipe, a bamboo mat, and a cot or two form the whole household gear. The farm stock is generally one or two

¹ 87 *pirkhani* rupees being equal to £10 (Rs. 100) of British currency, and the *sher* being 60 *tolas* or $1\frac{1}{2}$ English pounds.

Chapter IV.
Agriculture.
 Cultivators.

pairs of bullocks or buffaloes, one or two cows, and sometimes half a dozen goats. Except a few of the richest none of the husbandmen store grain. As a class the husbandmen are mild, orderly, and sober, and except a few of the richest, are thrifty even in wedding expenses. They manure their fields by burning grass, stubble and branches, but except a few who have gardens, they are not skilled cultivators. Their chief tools are a plough, a rake, *dūta*, and a clod crusher and furrow filler, *guta*. The holdings are much sub-divided, and nearly two-thirds of the husbandmen are tenants or field labourers. The well-to-do employ hired labour at sowing, transplanting and harvest time, and the poor landholders get their fields ploughed by lending their bullocks to each other.¹ Fowl-rearing goes on to a limited extent. But except by labour the husbandmen add little to their profits as farmers. Though not hopelessly involved, all are in debt and generally require grain advances both for sowing and for food. The cause of indebtedness is not so much extravagance as heavy rents and poor crops. In small transactions the yearly rate of interest varies from eighteen to thirty-six per cent a year. Though there is no marked change in the husbandmen's state within the last twenty years, grain prices and wages have risen and the value of land has increased. Land is a favourite investment among all men of means. Of late, much has changed hands at rates that do not yield the buyers a yearly profit of more than three or four per cent.²

¹ So common is the practice, that there is a special local name *varangula* for a pair of bullocks one of which is borrowed.

² Contributed by Mr. Sakhāram Baji Bavdekar.

CHAPTER V.

CAPITAL.

Chapter V.
Capital.

IN towns, landholders, state servants and a few Vánis, and in the rural parts, the village headmen, village accountants, and some of the larger landholders save money.

Investments.

Among those who save, the cost of living may be roughly put down at about thirty per cent of their income. Of the remaining seventy per cent, about twenty-five may go in buying ornaments, twenty-five in money-lending, and fifty in buying land. Except in the through grain traffic from the Southern Marátha districts to Bombay, people do not invest their savings in trade. They never buy shares in joint-stock companies, nor do they invest their capital in savings banks or in Government securities. When they cannot profitably invest it in land they lend their money at interest. Except that among townsmen, money-lending, and among countrymen, land, is the favourite investment, there is little difference in their way of disposing of savings.

Money Lenders.

Almost the whole money-lending business is in the hands of three classes, well-to-do Vánis, cultivators, and land proprietors, *vatandárs*. As a rule cultivators borrow from one man only. Where they are indebted to more than one, they generally settle with each creditor independently. In cases decided by a civil court, preference is given to the creditor who first applies for the execution of a decree. The judgment-creditor generally waits the utmost time allowed by the court before putting a decree into execution. He does this hoping that the debtor will come to terms, and by settling the debt privately save him the cost of executing the decree. Meanwhile he induces his debtor to mortgage his cattle, house or land. Except under the authority of a civil court, a creditor has no right to take possession of a debtor's crops or of any of his property. A debtor's land may be sold, but his dwelling house, one pair of bullocks, and some field tools and cooking vessels must be left untouched. A judgment-debtor's property is sometimes bought in by his friends, sometimes by the judgment-creditor, and sometimes by an outsider. A fair price is generally paid. No one is liable to imprisonment for debt.

A *patel*, or rich cultivator, seldom lends money to poor villagers; when he does, if the borrower has no credit, the lender generally takes a house or field in mortgage. Grain for seed and food is largely advanced to the poorer husbandmen. Payment is generally made in kind and sometimes in money. In *khóti* villages, the *khóts*, who as a class are badly off, do not lend money to any great extent. Craftsmen, though well able to hold their own with the money-lender, are as a rule unthrifty, given to drink, and sunk in debt.

In money loans interest is generally charged for the calendar, and in land mortgages and grain loans, for the Arabic or revenue year,¹ beginning from the *miriy* (5th June) when the first burst of the rains is due. When grain is lent, interest is nominally charged for six months, but at so high a rate as really to be equal to twelve months' interest. The usual rates are, in small transactions of less than £5 (Rs. 50), from eighteen to thirty-six per cent a year; above £5 (Rs. 50) and under £100 (Rs. 1000), with a mortgage on movable property, twelve per cent, and on immovable property from five to nine per cent; and in petty agricultural transactions on personal security twenty-five per cent.

Up to 1839, the *pirkhúni* rupee first struck by the Bijápur minister Pir Khán, and valued at about 2s. 3½d. (Rs. 1-2-4), was the standard coin. Since 1839 it has been replaced by the Imperial rupee.

As there is little local and almost no foreign trade, exchange bills, *hundis*, are very seldom used. A money order office opened since 1867, issued in 1878, 533 orders of the value of £2200 (Rs. 22,000). The business of this office was in the beginning of 1880 made over to the post department.

Of late years, except in a few cases where it has been sold in satisfaction of civil court decrees, land has not to any great extent been thrown up. Husbandmen are very seldom unable to pay the government demand. In former unsettled times the husbandmen gave up their lands, and they lapsed to the head of the village who was responsible for the payment to government of the whole village rental. Originally the headman had full power to sell or otherwise dispose of such deserted, *gatkul*, lands. But since 1853, though he can till, sublet, or mortgage them, he is not allowed to alienate them by sale. Lands are now seldom thrown up. A man in money difficulties makes over his land for a time to some well-to-do friend, who engaging to take his place as landlord, pays the government demand. Where the original holder is unable or unwilling to recover it, a civil court decree is obtained, and the land permanently changes hands. Land is seldom sold to outsiders. But of late a large area has passed from peasant-holders to village money-lenders, the former holders continuing to till the land as tenants.

There has also been a considerable increase in the amount of land mortgaged. When land is mortgaged, the owner, if, as is almost always the case, he is a cultivator, often becomes the mortgagee's tenant, and pays him rent, the mortgagee being responsible for the government assessment. The mortgagee has no other power over the land. He cannot interfere in any way with the cultivation or the crops. After satisfying the mortgagee, the tenant has the right to dispose of the crops in any way he pleases.

The practice of mortgaging labour for a term of years prevails both among cultivators and labourers, but chiefly among labourers. It is commoner in small outlying villages than in large towns.

Chapter V.

Capital.

Interest.

Currency.

Exchange Bills.

Land Transfers.

Labour Mortgage.

¹ The *samant* year, beginning from 1st *Kartik*, November, is not used.

Chapter V.

Capital.

Labour
Mortgage.

Labour contracts are generally for terms varying from one to three years. The mortgagor's services are generally pledged to rich cultivators and sometimes to merchants. The money is paid in advance, the labourer, besides food and some scanty clothing, working off the amount at from 18s. to £1 4s. (Rs. 9 - Rs. 12) a year. While fulfilling his engagement the mortgagor is absolutely the mortgagee's servant, and is not allowed to work for his own benefit. In return the master is bound to feed and house him. He cannot whip or otherwise punish him, or make over his right to a third person. The master has no claim on the mortgagor's wife and children, or on children born during the father's term of service.

Besides servants who have pledged their labour for a term of years, there is, chiefly in large landholding families, a distinct class of hereditary bondsmen, *bandās*, the children of the proprietor's handmaids or kept women. These *bandās*, though the morals of the women are by no means strict, are generally married to people of their own class. When a bondswoman marries a man who is a servant in another family, she leaves her old master, and she and her children become her husband's master's dependents. There is no law against a bondsman leaving his master's house, nor if he does leave, is there any law helping his master to recover him. But as they lead easy lives, are well fed, trusted, and treated with kindness, bondsmen seldom leave so long as their masters can keep them. When a proprietor's family divides, the bondsmen are distributed among the different members, so that bondsmen and masters have in many cases been connected for generations.

Labourers.

There is no large class of landless or day labourers. Almost every one not an artisan or a trader is to some extent a husbandman. The few labourers who work in the field are paid in kind. During the last two generations there is said to have been little change in the labourers' state. The bulk of the poorer classes earn enough to support themselves by tillage. Even in the slack time the poorest will not, except under pressure, come as day labourers on roads, buildings, and other public works. Cultivators' and landholders' women and children are largely employed in fields without wages. When at work for a stranger, they are paid daily from three to $4\frac{1}{2}$ pounds (2 *shers* - 3 *shers*) of rice.

Wages.

The daily money wage of an unskilled labourer varies from $3\frac{1}{4}d.$ to $1\frac{1}{2}d.$ (*annas* $2\frac{1}{2}$ - *annas* 3), a woman's wage is $3d.$ (2 *annas*), and a boy's from $1\frac{1}{2}d.$ to $2\frac{1}{4}d.$ (*anna* 1 - *as.* $1\frac{1}{2}$). Field labourers are paid in kind, the average daily wage of a man being six pounds (4 *shers*) of husked rice, of a woman $4\frac{1}{2}$ pounds (3 *shers*), and of a boy three pounds (2 *shers*). A day labourer, who thirty years ago (1850) used to get $3d.$ (2 *annas*) in Vádi and Kudál, and $2\frac{1}{4}d.$ ($1\frac{1}{2}$ *annas*) a day in Bándá, now gets $1\frac{1}{2}d.$ (3 *annas*) and $3\frac{3}{4}d.$ ($2\frac{1}{2}$ *annas*). The daily wage of a bricklayer has during the same time risen in Vádi and Bándá from $6d.$ to $9d.$ (*annas* 4 - *annas* 6), and in Kudál from $9d.$ to 1s. $6d.$ (*annas* 6 - *annas* 12). A carpenter's daily wage has also during the same time increased in Vádi and Bándá from $6d.$ to $9d.$ (*annas* 4 - *annas* 6), and in Kudál from $7\frac{1}{2}d.$ to 1s. (*annas* 5 -

annas 8). There are no smiths ; carpenters always do smiths' work as well as their own.

In 1838-39, fine rice, *surai*, of the common sort was sold at thirty-six, coarse rice, *ukde*, at thirty-nine, and wheat at forty-five pounds for 2s. (Re. 1). Twelve years later (1850), the price of fine rice had fallen to 43½ pounds, and that of coarse rice, *ukde*, and wheat to fifty-one. In 1860, the price of fine rice had risen to 24½, of coarse rice to thirty-three, and of wheat to thirty-six pounds. In 1870 prices were still higher, fine rice selling at 18½, and coarse rice at twenty-four pounds. For several years after 1870 prices continued to fall, till, in 1874, they were almost as low as in 1838. Since then, chiefly on account of the famine in 1876 and 1877, prices have again risen, and in 1878, fine rice stood at sixteen and coarse rice at twenty-one pounds.

The following statement gives the chief available price details :

Sávantvádi Grain Prices, 1862-1879.

PRODUCE	POUNDS FOR TWO SHILLINGS.								
	1862	1863.	1864	1865.	1866	1867.	1868.	1869	1870.
Rice (unhusked)	26½	21	15½	15½	16	19½	23½	18½	19½
Eleusine corocana, <i>nachni</i>	60	40½	30½	30	34½	42	57	46½	48
Dolichos uniflorus, <i>kabth</i>	42	33½	21	21½	33½	39½	42	40½	43½
Phaseolus mungo, <i>adul</i>	34½	28½	20½	20½	24	33	36	30	32½
Cajanus indicus, <i>tor</i>	24½	17½	12	11½	11½	16½	21½	18½	16½
Wheat ..	30½	21	12½	13½	13½	18½	29½	25½	16½
Peas ..	29	21	14½	17½	18½	19½	24½	21	15½

PRODUCE	POUNDS FOR TWO SHILLINGS.									
	1871	1872	1873.	1874	1875	1876	1877	1878	1879	
Rice (unhusked)	21	15	16½	25½	25½	23½	18½	15	15	
Eleusine corocana, <i>nachni</i>	51	48	42	61	63	57	28½	36	39	
Dolichos uniflorus, <i>kabth</i>	51½	48	33	45	46½	37½	22½	28½	24	
Phaseolus mungo, <i>adul</i>	36	33	21½	34½	36	36	22½	27	22½	
Cajanus indicus, <i>tor</i>	17½	22½	24	27	36	39	25½	25½	27	
Wheat	16½	16½	16½	15½	16½	16½	13½	19½	16½	
Peas	20½	15	15	15	15½	15	1½	18	15	

In¹ weighing gold and silver the unit of measure is a *tola* or ½ths of an ounce. The weights are either round, flat or square² pieces of copper, brass, and zinc, or silver rupee pieces with ¼ of an ounce (2 *gunjs*) added to each rupee. The table of measures is four *ulids*, one *gunj* ; eight *gunjs*, one *mása* ; twelve *másas*, one *tola* ; twenty-four *tolás*, one *sher* ; and forty *tolás*, one *rát* or pound. For copper, brass, zinc, and iron, flat round weights are used made of stone for quantities of less than four *shers*,³ and for larger quantities.

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Capital.
Prices.

Weights.

¹ Contributed by Mr. Vmáyak Vithal Sabnis.
² There are other weights in use, made of zinc in Goa, called 'mark' from the Portuguese 'marco,' meaning a weight of sixteen ounces or forty *tolás* of gold or silver. A set of seven weights fitting in each other, the mark is in the form of a tumbler, and varies in circumference from one inch to four inches and in height from 1½ to 2 inches.
³ European iron weights of half an ounce, one ounce, two and four ounces, half a pound, one pound, and two pounds, have lately been introduced.

Chapter V.

Capital.

Weights.

of iron. For these metals the table of measures is ; eight *gunjs*, one *mása*; twelve *másas*, one *tola*; seventy *tolás*, one *sher*; and sixteen *shers*, one *man*. Instead of the usual *sher* of thirty two *tolás*, the unit of measure is, for cotton, a *bandari* of twenty-eight, and for tobacco, a *patgari* of twenty-four *tolas*. For coffee, drugs, spices, molasses, and sugar, six or eight cornered iron weights are used. They are weighed according to the following table: four *tolás*,² one *narták*; two *nartáks*, one *pávsher*; two *pávshers*, one *ardhsheer*; two *ardhshers*, one *sher*; five *shers*, one *pásri*; two *pásris*, one *dhada*; and four *dhadás*, one *man*.

Measures

Grain and salt are sold by wooden capacity measures, of a round tumbler-like form, varying from six inches to two feet in circumference and in height from three inches to one foot. They are measured according to the following table: three three-fourth *tolás*, one *chirták*; two *chirtáks*, one *narták*; two *nartáks*, one *pávsher*; two *pávshers*, one *ardhsheer*; two *ardhshers*, one *sher*; four *shers*, one *páyli*; two *páylis*, one *kudar*; twenty *kudacs*, one *khandi*; and four *khandis*, one *bhara*. Oil is sold by copper capacity measures in tumbler or jar form according to the following table: thirty-two *tolás*, one *sher*; five *shers*, one *pásri*; two *pásris*, one *dhada*; two *dhadás*, one *ardhman*; and two *ardhmanas*, one *man*. Clarified butter, *tup*, is in the market sold by weight, but at private sales, by capacity measures, the *sher* being twice that used in measuring oil. Milk is sold by capacity measure, the *sher* being two and a half times that used for oil. Sometimes in quart and pint bottles, and sometimes in tumbler or pitcher-like copper or earthen measures, liquor is sold according to the following table: thirty *tolás*, one *sher*, and sixty *shers*, one *man*. The length measure in use is an iron, brass, or wooden yard marked with inches. Cotton, silk, and woollen goods are sold, as a rule, by length and by number. For masonry, timber and earthwork, the unit of measure is a foot and sometimes a cubit, and for land the unit is a bamboo rod, *káthi*, of about $8\frac{3}{4}$ feet. The table is: twenty *káthis*, one *pánd*, and twenty *pánds*, one *bigha*. For road metal a wooden box, *phara*, of $2\frac{1}{2}$ cubic feet is used. The table for measuring time is sixty *pals*,³ one *ghatka*; seven and a half *ghatkás*, one *prahar*; eight *prahars*, one day, *divas*; seven and a half days, one week, *áthradá*; two *áthradás*, one fortnight, *paksh*; two *pakshas*, one month, *mahina*; six *mahinás*, one *ayun*; and two *ayuns*, one year, *varsh*.

¹ Forty *tolas* are equal to one pound.

² $2\frac{1}{2}$ *pals* make one minute.

CHAPTER VI.

TRADE.

Chapter VI.

Trade.

Roads.

Two main lines of road from Vengurla to Belgaum, one in the centre the other in the south of the district, pass through Sávant-vádi. Of these the southern or Rám pass road, running south-east and crossing Bánda and Bbedshi, is forty-eight miles from Vengurla to the top of the Sahyádris. This road, with a general breadth of thirty feet, was finished in 1821. In 1826 it was the great highway to the upper country from Goa in the south-west, and from Vádi, Vengurla and Málvan in the west. The approach to the pass above and below was a made road, and the ascent was fit for every kind of wheeled carriage. The tract of country below was wild, hilly, and covered with large trees, clumps of bamboos and thick underwood with partial cultivation in the valleys.¹ Until, in 1869, the new road by Ámboli was made, this was the main trade line from Vengurla to the Deccan. Steep and crossed by several streams, unbridged and unfordable during the rainy season, this road is very difficult. The portion that lies in Vádi is kept in order by the state at an average yearly cost of £250 (Rs. 2500). Except in the very steep ascent of the Sahyádris, which is difficult to keep in repair, the whole length of the road is in fair order. It is now little used except by traders from Goa and by pack-bullock Vanjáris carrying grain between the sea coast and the Deccan. The other main pass across the Sahyádris is known as Ámboli, from a village at the top, or as Párpoli, from a village at the bottom. At the time of the British conquest (1821) several zigzags made the passage very difficult for heavy ordnance. It was shortly after made passable for small guns, and in 1826, though stony was in no part very steep. It was used by merchants passing from Goa to the Deccan.² It is now crossed by a first class cart road that was thrown open to traffic on the 1st of November 1869. Passing about two miles north of Vádi, through the villages of Ákeri and Dánoli, it crosses the Sahyádris range by an easy rise leading to Ámboli at the crest of the pass, and thence to Kanur and Belgaum. Of its total length of seventy-eight miles the thirty-six in Vádi are bridged, and except half a mile where laterite is used, are metalled with trap. This road, built by the British Government at a cost of £139,975 (Rs. 13,99,750), is kept in good order at a yearly cost of £220 (Rs. 2200).³ Four

¹ Clune's Itinerary, 149.² Clune's Itinerary, 149.³ So great were the advantages of this road that cart hire between Vengurla and Belgaum fell from £1 10s. to 10s. (Rs. 15-Rs. 5).

Chapter VI.**Trade.****Roads.**

toll-houses along the line of road yielded in 1878 a revenue of £1198 (Rs. 11,980). In the twelve miles from Ákeri to Dánoli at the foot of the pass, there are five iron girder bridges built of blackstone and limestone, having from one to four spans each of from thirty to sixty feet. The pass, ten miles long with a gradient of one in twenty-eight, rises at the crest to a height of 1900 feet. The roadway from top to bottom is protected by parapet walls, mounds of earth, and an earth-backed laterite wall. Breast-walls have been put in wherever there were any signs of slipping. Of the five minor hill routes the Talkat and Mángeli are little used, and the Ghotga, Ránga or Prasiddhgad, and Hanmant have lately been improved and have a considerable pack-bullock traffic.

Besides the above, two short lines each of about $2\frac{1}{2}$ miles, bridged and metalled throughout, form junctions between the town of Vádi and the main Vengurla and Ámboli trunk road. They were built and repaired by the Vádi state.

In addition to the above, a number of unmetalled roads form lines of communication with towns and villages within and without the Vádi state. Of these the chief are : (1) An excellent cart road about eight miles from Vádi to Bándá, bridged except in two places where broad shallow streams are crossed by paved ways. Until these are bridged this road is during the rains unpassable for carts. (2) A cart road from Vádi to Kudál, a fair road in the dry season but difficult in the rains. From Kudál this road leads thirty-three miles to the Phonda pass by which the Sahyádri range is crossed by Kolhápúr into the Deccan, and in fair weather a considerable grain and cotton traffic passes along it from Kolhápúr to Vengurla. About half a mile from Kudál on the Vádi side, a branch passing through the villages of Váravda and Mát, joins the Vengurla and Ámboli trunk line, and by it reaches Vengurla, a distance of fourteen miles. The increase of traffic over the Phonda pass has made a toll at Kasál necessary. Another branch of this road, except in the monsoon practicable for carts, breaking off about three miles from Kudál, leads to Málvan. (3) A road from Vádi about nine miles to Támboli, though not bridged, is an excellent fair weather cart tract. Near Otavna about six miles from Vádi, it is crossed by the Terekhol. Besides these, many other roads connecting nearly all the principal towns and repaired every year by the state at an average cost of £100 (Rs. 1000), are all in fair weather more or less practicable for carts. In 1878, at a cost of £150 (Rs. 1500), thirteen and a half miles of road were made between Ámboli and the Rám pass. It is of much use for forest purposes and has increased the traffic down the Párpoli road to Vengurla. In 1879 a new line of $9\frac{1}{2}$ miles was opened between Dánoli at the foot of the Ámboli pass and Bándá. This will be an important line of traffic when the new Goa canal between Thi and Kolval is finished.¹

¹ This canal now being made by the Portuguese government will bring water communication within ten miles of Bándá and shorten the journey between the Ámboli pass and Panjim in Goa.

The cost of public works including roads is met partly from the state revenues and partly from the proceeds of tolls and local funds. There are tolls at Kasál and Ájgaon, and on the Ámboli, Rám, and some of the old passes. The Ámboli pass toll yielded, in 1878, £1198 (Rs. 11,980), and the tolls on some of the old passes £202 (Rs. 2020), the charges on account of these tolls being £130 (Rs. 1300) and £359 (Rs. 3590) respectively.¹

On the portion of the Vengurla and Belgaum trunk road within Sávantvádi limits are five iron bridges. Three of these bridges are of considerable size, one of four sixty-feet spans, over the Terekhol river at Dánoli; one of three spans, of the same size, over the Kajarkand river near where the trunk road meets the branch line leading to Sávantvádi; and one of two spans, each of thirty feet, over the Phugichával near the village of Nandkhol. There are also some small masonry bridges on the roads from Sávantvádi and Vengurla to the Phonda pass, and two very old masonry bridges, built during Muhammadan rule, over small streams at Bándá close to the Goa frontier.

There are six rest-houses, *dharmshálas*, one at the foot of the Párpoli pass, built in 1871 at a cost of £120 (Rs. 1200); one at Bándá, built in 1872 at a cost of £103 (Rs. 1030); one at Ákeri, built in 1874; one at Dukánvádi, built in 1877 at a cost of £50 (Rs. 500); one at Vádi; and a sixth at Ámboli, built in 1880. Besides these there are travellers' bungalows at Bándá, Bhedshi, Ámboli, Rám pass, Ákeri, and Dánoli.

In the sea coast villages of Áruna, Kalna, and Chandvan are small native craft used chiefly for fishing at the mouths of the rivers, and for carrying passengers and such goods as rice and cocoanuts. Varying in size from $\frac{2}{3}$ ths to $1\frac{1}{3}$ ths of a ton, carrying from four to twenty passengers, and costing from £1 to £20 (Rs. 10-Rs. 200), some are fishing boats, *machhvas*, with a lateen sail, and others are rowing boats, *donis* and *hodis*, the *hodi* dug out of a mango tree and the *donis* built of planks by village carpenters. Except ropes, which are brought from Bombay, the sails, masts, and other parts of the boats' gear are locally manufactured.

Under the supervision of the inspector of post offices Konkan division, there are seven post offices at Vádi, Bándá, Kudál, Ámboli, Ákeri, Nerur, and Kasál. Of these, those at Vádi and Kudál are head offices; that at Bándá a sub-post office; and those at Ámboli, Ákeri, Nerur, and Kasál branch post offices. The yearly salary of the deputy postmasters in charge of the head offices varies from £36 to £60 (Rs. 360-Rs. 600), of the sub-postmasters from £18 to £24 (Rs. 180-Rs. 240), and of the branch postmasters from £12 to £18 (Rs. 120-Rs. 180). The branch office at Ámboli is in charge of a schoolmaster who is yearly paid £6 (Rs. 60). For delivery of letters at important stations there are four postmen, each with a yearly salary of £9 12s. (Rs. 96). Village letters are delivered by seven village postmen, four of whom with yearly salaries varying

Chapter VI.

Trade.

Tolls.

Bridges.

Rest Houses.

Boats.

Post Offices.

¹ During the ten years ending 1873 the average yearly sums of £545 (Rs. 5450) and £473 (Rs. 4730) were realised from the Amboli and Rám Ghat tolls.

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from £9 12s. to £12 (Rs. 96 - Rs. 120) are paid from the Imperial post establishment, while the remaining three, divided into two grades, the first with a yearly salary amounting to £10 16s. (Rs. 108) and the second to £12 (Rs. 120), are paid from provincial services. In 1878 the collections on this account amounted to £195 (Rs. 1950), and the amount of postage stamps sold was £126 (Rs. 1260).

Trade.

Before the establishment of Portuguese power (1510), Sávantvádi was the highway of a great traffic, and Bánda was a place of much trade and wealth. During the sixteenth and seventeenth centuries trade suffered much from the rivalry of the Portuguese, and in the disturbances of the eighteenth century it almost entirely disappeared. Since the establishment of order under the British (1818), though it is still a place of small commerce, local trade has greatly developed, and merchants have it is said increased fivefold. The bulk of the trade is a through traffic in hemp, cotton, and grain from the Southern Marátha Country to Vengurla. Cotton, gram, and wheat are brought from the Southern Marátha Country on pack bullocks by caravans of Lamáns, who pass down to the coast.¹ Groceries and spices brought from Bombay by steamers touching at Vengurla, are in considerable demand, but the import trade is small. In wholesale transactions all purchases are for ready money. In retail dealings the sellers keep a running account with their customers which is settled at short intervals.

The ordinary course of trade, the export through Sávantvádi of the grain and other field produce of the Deccan and Southern Marátha districts, was, during the famine of 1876-77, changed into a great import of food grains from Bombay and Kathiáwár through Vengurla. The details are :

Amboli Pass Trade, 1875-76 and 1876-77.

DESCRIPTION	Up.		Down	
	1875-76	1876-77	1875-76	1876-77
Laden carts ...	10,661	40,181	11,992	5577
Empty „ ..	10.9	1685	91	9,317
Laden bullocks ..	12,460	10,250	12,771	10,317

Exports.

The local exports are cocoanuts, flax, betelnut, myrobalaus, cocoanut fibre, cashewnuts, black pepper, *kokam*, and a little coffee.

Imports.

The imports are metals and Europe piece goods from Bombay ; sugar, dates, spices of all kinds, salt-fish, and cocoanut oil from the coast ; wheat, millet, Indian millet, *bur*, *Cajanus indicus*, *mug*, *Phaseolus radiatus*, *ulid*, *Phaseolus mungo*, molasses, garlic, onions, tobacco, snuff, opium, cotton, indigo, and all kinds of native cloth from the Deccan ; and fruit, paper, poultry, and candles from Goa. ¹

¹ In 1868 the bullock traffic down the old Papoh pass road yielded from £200 to £300 (Rs. 2000 - Rs. 3000) from a toll of 1d. levied from each bullock.

The town of Sávantvádi is well known for the manufacture of fancy articles, such as embroidered or simple caskets, fans, and baskets of *vála* or *khushkhas* grass,¹ hornwork, lacquered toys and furniture, playing cards, *ganjiphás*, and smoking hubble-bubbles, *gudgulis*. Of these the grass caskets, fans, and baskets are prepared by men of the Jingar caste, who forty years ago were employed as saddlers, sheath-makers, and arm-polishers. The articles are tastefully ornamented with gold or silver thread, spangles, talc, green beetles' wings, satin, velvet, and peacock's feathers. The ornamental lace and feather work was introduced about thirty years ago, perhaps at the suggestion of some British officers stationed in Vádi. The caskets, of different shapes and about two feet long $1\frac{1}{2}$ feet broad and $\frac{3}{4}$ of a foot high, cost from £2 10s. to £15 (Rs. 25 - Rs. 150) a pair; fans, with or without handles, cost from 3*d.* to £10 (*annas* 2 - Rs. 100) a pair; and baskets, also with or without handles, cost from 1s. to £1 (*annas* 8 - Rs. 10) a pair. Table lamp-stands, also of *vála* grass, cost from 4s. to £1 10s. (Rs. 2 - Rs. 15) a pair. Except velvet which is brought from Pánjim in Goa, and talc, peacock's feathers, and *vála* grass, which can be had in Vádi territory, all the materials required for this industry are imported from Bombay. The Jingars, about seventy-five in number, are not well-to-do. They work only for about eight months in the year, as in the rains the articles cannot be easily dried, and communication with Bombay and other places is almost stopped. The demand is limited chiefly for export to Europe.

Horn work is prepared by a few Hindu carpenters. Formerly horns were used only for dropping water over idols and for keeping gunpowder. Improvements were made about thirty years ago, and from thirty to thirty-five different articles² are now offered for sale. The horns are partly found in Vádi and partly brought from Malabár. Their price varies from 1s. to 4s. (*annas* 8 - Rs. 2). The left horn is more useful than the right as a water-horn in religious ceremonies, and fetches a higher price. The demand for the articles is less than it was ten years ago.

The making of lacquered toys and furniture was introduced about forty years ago by men of the Chitári caste. A full set of toys, costing from 11s. to £2 (Rs. 7 - Rs. 20), is generally, in the month of *Shrávan* (August - September), sent with other articles,

Chapter VI. Industries.

Horn Work.

Toys.

¹ *Andropogon muricatum*. The roots only are used.

² The chief of these articles are: polished horns, from 3s. to £1 (Rs. 1½ - Rs. 10) each; lotuses, *kannals*, from 6s. to £1 10s. (Rs. 3 - Rs. 15) each; caskets for keeping idols, *sampusha*, from 4s. to 14s. (Rs. 2 - Rs. 7) each; other caskets from 2s. to 10s. (Rs. 1 - Rs. 5); cups from 2s. to 10s. (Rs. 1 - Rs. 5) a pair; trays, from 4s. to 11s. (Rs. 2 - Rs. 7) each; small boxes, from £1 to £3 (Rs. 10 - Rs. 30) each; handles for walking sticks, from 1s. to 14s. (*annas* 8 - Rs. 7); small lamps, *nincinjans*, from 2s. to 12s. (Rs. 1 - Rs. 6) a pair; stools, from 8s. to £1 4s. (Rs. 4 - Rs. 12) each; writing boxes, *kalamdāns*, from £1 10s. to £5 (Rs. 15 - Rs. 50) each; knife-handles, 3*d.* to 2s. (*annas* 2 - Rs. 1) each; wrist chains, from 10s. to £1 10s. (Rs. 5 - Rs. 15) a pair; neck chains, from £1 10s. to £3 (Rs. 15 - Rs. 30) each; watch chains, from 8s. to £2 (Rs. 4 - Rs. 20) each; combs, from 1s. to 4s. (*annas* 8 - Rs. 2) each; spoons, 6*d.* to 2s. (*annas* 4 - Rs. 1) each; tumblers, from 2s. to 10s. (Rs. 1 - Rs. 5) each; buttons, from 1*d.* to 1s. (*annas* 1 - 8); flower stands, from 10s. to £2 (Rs. 5 - Rs. 20) each; antelopes, goats, cows, oxen, and buffaloes, from 12s. to £3 (Rs. 6 - Rs. 30) a pair, and elephants, from £1 to £3 (Rs. 10 - Rs. 30) a pair.

Chapter VI.
Industries.

Cards.

as a present to newly married girls by their fathers-in-law. Low wooden stools, *páts*, used especially at dinner time, and cradles, *páhuás*, are also prepared in large numbers. The stools cost from 2s. to £1 (Re. 1 - Rs. 10) and the cradles from 10s. to £1 10s. (Rs. 5 - Rs. 15). *Hed*, *Adina cordifolia*, and jackwood, generally used in making these articles, are found in abundance in Vádi, and the lac and colouring stuff is brought from Bombay. The demand for this lacquered work is small.

Round playing cards, *ganjiphás*, are also prepared by the Chitáris. These are of two kinds, *hukumi* or *changkínchani*, with ninety-six and *dashártíri* with 120 cards. They were first prepared in Vádi about the year 1760, and cost from 2s. to £2 (Re. 1 - Rs. 20) the set. Another kind, with fifty-two cards, costs from 2s. to 10s. (Re. 1 - Rs. 5). The paper required is brought from Kolhápur. Besides the Chitáris, who are about twenty-two in number and who have been doing the work for many years past, a few Maráthás, Shimpis, and Vánis have also taken to it. Some of these have small capitals, and some are hired workmen. Though a good many are sent to Bombay and to the upcountry districts, the demand falls short of the supply.

Hubble Bubbles.

Smoking hubble-bubbles, *gadgadís*, consist of four parts, the cocoanut shell, *bela*, the standing tube, *meru*, the tobacco bowl, *chilim*, and the pipe, *nali*. The cocoanut shell, *bela*, is polished and ornamented sometimes with silver; the standing tube, *meru*, and pipe, *nali*, are made of wood and show considerable skill. The whole apparatus costs from 10s. to £1 10s. (Re. 1 - Rs. 15).

Salt.

Till February 1880, when they were closed by an arrangement with the British Government, there were salt pans at Ájgaon and Áraunda about fifteen miles south-west of Vádi. The supply was small, hardly enough to meet the local demand.

Fairs.

Yearly fairs are held at Ákeri in March, at Talavna in February, and at Tulas in May. They are on a small scale, attended only by people from the neighbouring villages.

CHAPTER VII.

HISTORY.

AMONG the materials for the early history of the Konkan, the inscriptions that belong specially to Sávantvádi and its immediate neighbourhood show that during the sixth, seventh, and eighth centuries, the Chálukyás ruled over Sávantvádi.¹ In the tenth century (933, S. 855), the rulers were Yádavs.² In the thirteenth century (1261), the Chálukyás, ruling from Kalyán, were again in power.³ At the close of the fourteenth century (1391), Vádi was under an officer of the Vijayanagar dynasty, whose head-quarters were at Goa,⁴ and about the middle of the fifteenth (1436), it formed part of the territory of a powerful local Bráhmaṇa dynasty.⁵

On the establishment of their power at the close of the fifteenth century, Sávantvádi became part of the territory of the Bijápur kings. Under a chief styled the Desái of Kudál, the district was distributed among five divisions, *parganás*,⁶ two extra divisions, *karyáts*,⁷ one sub-division, *viláyat*,⁸ twelve petty divisions, *tarafs*,⁹ and one port.¹⁰

About the middle of the sixteenth century (1554), one Máng Sávant, revolting from Bijápur, tried to establish himself as an independent chief. Making Hodavda, a small village six miles from Vádi, his head-quarters, Máng Sávant defeated the Bijápur troops sent against him, and till his death maintained his independence. So great a name did he gain for courage and skill, that on his death he was deified, and his shrine, *math*, is still to be seen at

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History.

Early Hindu,
500-1500.

Bijápur Rule,
1500-1627.

Máng Sávant,
1554.

¹ The Chalukya inscriptions are, the grant of the Kochra village by Pulikesi I, probably about the middle of the sixth century (Bom. Gov. Sel. X., New Series, 233); (2) the grant of the village of Kundivátak by Mangal, the second son of Pulikesi, probably about 580 (Ind. Ant. VII. 163, Bom. Gov. Sel. X. 195); (3) a grant, probably about the beginning of the seventh century, by the Queen Consort of Chandraditya, the elder brother of Vikramaditya I. (Ind. Ant. VII. 163 and VIII. 45, Bom. Gov. Sel. X. 183); (4) a grant dated 705 (S. 627), by Vijayaditya, the son of Vinayaditya (Bom. Gov. Sel. X. 206).

² The inscription is a metal plate grant by the Yadav prince, Govind Ráj, of the village of Lohugráma in the district of Rampur (Bom. Gov. Sel. X. 249). The village and district named have not been identified. According to Jervis (Konkan, 81), in the twelfth century the Desai of Savantvadi, the most northern of the Palugar chiefs, overran the whole of the Konkan.

³ Bom. Gov. Sel. X. 251. The grant was of the village of Kochra within Sávantvádi limits. According to Jervis (Konkan, 63), in 1347, all except the south districts of Phonda, Maneri, Pedna, Dicholi, and Sankhli were nominally under the Bahmanis (1347-1512). The extreme south was under Vijayanagar.

⁴ Ditto, 298. A king of Savantvadi, a very learned Jain, is mixed up with a Belgaṇa legend (Ind. Ant. IV. 140). The story gives no clue to the probable date.

⁵ The five divisions were, Phonda, Maneri, Pedna, Dicholi, and Sankhli.

⁶ The two extra divisions, *karyáts*, were Nárur and Patgaon.

⁷ The sub-division, *viláyat*, was Banda.

⁸ Of the twelve petty divisions, *tarafs*, three, Manohar, Talavda, and Mángaon were in Vadi; two, Aagaon and Santarda in Bándá; four, Pát, Haveli, Kalsuh, and Bondava in Kudál; and three, Maland, Varad, and Masura in the territory transferred to the British Government in 1812-13.

⁹ The port was Vengurla.

Chapter VII.

History.

Khem Sávant I.,
1627-1640.
Som Sávant,
1640-1641.
Lakham Sávant,
1641-1665.

Phond Sávant, I.,
1665-1675.
Khem Sávant II.,
1675-1709.

Phond Sávant II.,
1709-1737.

British Treaty,
1739.

Hodavda. Máng's successors, unable to maintain their independence, again became feudatories of the Bijapur kings. On the decline of Bijapur power in the early years of the seventeenth century (1627), Phond Sávant's son Khem Sávant, who held part of the Váli country in grant, *jághir*, made himself independent. In 1640, Khem was succeeded by his son Som Sávant, who, after ruling for eighteen months, was succeeded by his brother Lakham Sávant. This chief, in a predatory incursion, made captive the Kudál Desái,¹ put him to death, and seized his lands.² Shortly after, when Shiváji's power seemed in the ascendant (1650), Lakham Sávant tendered him his allegiance, and was confirmed as Sar Desái of the whole south Konkan. In a second treaty (1659) it was settled that one-half of the revenue should belong to Shiváji and be collected by his agents, and the other half, exclusive of his rights as *deshmukh*, should remain to Lakham. Under the terms of this treaty Lakham became bound to garrison the forts and to keep a body of 3000 infantry ready for service. Repenting of this alliance and not abiding by the terms of the treaty,³ Lakham renewed his allegiance to Bijapur. In May 1660, Báji Phasalkar, one of Shiváji's earliest followers, fought a drawn battle with the Váli commander Kay Sávant, in which both were slain.⁴ In 1662, Shiváji defeated Lakham's army, overran Váli, and forced the chief to throw himself on his mercy.⁵ From political and family motives, for the Sávants like himself belonged to the Bhonsla family, Shiváji reinstated Lakham under promise that he would always live at Kudál, neither build nor repair forts, and entertain no large body of troops. Dying in 1665, Lakham was succeeded by his brother Phond Sávant, who, after ruling for ten years, was (1675) succeeded by his son Khem Sávant. This chief by helping the Moghals in their struggles with Shiváji, and making frequent raids across the Goa frontier, considerably increased his territory. Afterwards (1707), supporting Shiváji's grandson Sháhu in his contest with the Kolhápur chief, he was confirmed in his possessions. About this time he is described as a soldier of fortune, with 7000 or 8000 men and two pirate grabs, fighting for the chief who paid him best.⁶ Dying in 1709 without male issue, Khem was succeeded by his nephew Phond Sávant. Though a lover of peace Phond Sávant's rule was much disturbed by land wars with Kolhápur and Goa, and by sea fights with Ángria. In 1730, so much did their commerce suffer from Ángria's attacks, that the British Government formed an offensive and defensive alliance with the Sávants.⁷ They agreed that neither should attack the ships of the other, that British wrecks should

¹ From this time till in about 1670 they made Váli their head-quarters, the Sávants were styled chiefs of Kudál.

² According to the Hindu codes, Bráhman murder being a very heinous crime, the present ruling family has been, ever since the Kudál Desái's death, considered obnoxious to the vengeance of the spirit of the murdered Desái. As the Desái's spirit is particularly exerted by the use of the Kudál sea, the Sávants have always employed a Bráhman to seal their state papers. — *Bom. Gov. Sel.* X. 154.

³ Grant Duff, 75, 76.

⁴ Grant Duff, 81.

⁵ Grant Duff, 84.

⁶ Hamilton's New Account, I. 208.

⁷ He is styled Ponde Sáant, Sar Desái of Kudál. — *Atchison's Treaties*, IV. 439.

receive all aid and assistance; that their ports should be open and free to each other for trade; that they should join to attack the sons of Kánhoji Ángria; and that the British should supply the Sar Desái with warlike stores and artillery.¹ About this time (1730), Nág Sávant, Phond Sávant's second son, taking the Hera and Chandgad² districts above the Sahyádris, established a post at Chandgad, and built the fort of Gandharvagad. Phond Sávant's latter years were full of troubles. His eldest son Nár Sávant rebelled and was slain in a skirmish. And so keenly did Phond Sávant feel his son's death, that appointing his young grandson Rámchandra Sávant his heir, he retired into private life and died in 1737.

During Rámchandra's minority, the state was managed by his uncle Jayráam Sávant, a man of great strength and courage. In spite of his good qualities, Jayráam Sávant's management was at first unsuccessful. Ángria took Bhagvantgad and Bharatgad, crossed the Kudál river, defeated him at Bambardi, captured Shivrám Sávant his brother, and compelled the Vádi state to cede two-fifths of the Sálshi revenue. At the same time the Portuguese seized five of the southern districts, together with the fort of Yashvantgad. Jayráam's reverses did not last long. In 1745 the five districts were recovered, and for a time Bárdes also was taken. Three years later (1748), Tuláji Ángria was defeated with heavy loss at Kudál,³ pursued as far as Sangva near Ratnágiri, and his country laid waste. Bharatgad and the districts between the Kudál and the Garnár rivers were recovered, and a third raid of Ángria's was successfully beaten off. Shortly after, Jayráam quarrelled with his nephew, and retiring in disgust to Kudál, died there in 1753.

Two years later (1755), his nephew Rámchandra died, and was succeeded by his son Khem Sávant the Great. In 1763, Khem married Lakshmibái, daughter of Jayáji Sindia and half sister of Mahádáji Sindia, and through their influence received from the Emperor of Delhi the title of Ráje Bahádur.⁴ About this time British commerce suffered severely from the attacks of Vádi and Kolhápúr pirates. In 1765 (7th April), an expedition under Major Gordon and Captain Watson of the Bombay Marine, captured the fort of Yashvantgad or Redi, and changed its name to Fort Augustus. Khem Sávant, 'the Bhonsla,' agreed, on receiving back Redi fort, to cede the lands between the Karli and Sálshi rivers, from the sea to the Sahyádris; to pay £10,000 (Rs. 1,00,000) for war expenses; to let British merchants pass freely; to keep no navy; and in the event of a war with the Maráthás, to help the British.⁵ This treaty was broken almost as soon as it was signed, and next year (1766) the Bombay Govern-

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Phond Sávant II.,
1709-1737.

British Treaty,
1730.

Rámchandra
Sávant I.,
1737-1755.

Jayráam Regent,
1737-1753.

Khem Sávant III.
'The Great',
1755-1803.

British Treaty,
1765.

¹ The treaty is given in full in Aitchison's Treaties, IV. 439-440.

² The Chandgad district was afterwards lost.

³ In remembrance of this victory his state kettledrum, *nobat*, is still beaten in the palace at Vádi.

⁴ According to Grant Duff (40), the Sávants got this title from the Bijápúr kings, in whose wars against the Portuguese they distinguished themselves as commanders of infantry.

⁵ Aitchison's Treaties, IV. 440.

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Khem Sávant III.
'The Great,'
 1755-1803.

British Treaty,
 1766.

War with
Kolhápur,
 1776-1787.

The Portuguese,
 1803.

Phond and Shrirám
Sávants,
 1803-1805.

ment sent Mr. Mostyn to make a fresh settlement. A second treaty was concluded, which, among other terms, bound the chief to furnish two hostages, and to cede the fort of Vengurla to the British for thirteen years, or during such further time as the war indemnity amounting to £20,000 (Rs. 2,00,000) remained unpaid.¹ Soon after the treaty was concluded the hostages escaped; and the Vádi chief successfully frustrated all attempts to collect the Vengurla revenue. In 1780, at the end of the thirteen years, the Vádi government demanded Vengurla, and on its being refused, the fort was attacked and taken. Two years before (1778), the Kolhápur chief, envious of Khem Sávant's honours and independence, overran the state; captured the fort of Gandharvagad; and forced from Khem Sávant the cession of one-third of the Máland and Varád revenue, and of a fixed yearly sum from Pát and Haveli. Shortly after (1783), through the influence of Sindia, the Delhi Emperor granted the Vádi chief the peacock's feather, the symbol of independence. Enraged at this further advancement, the Kolhápur chief sending an army against Vádi, assaulted, but failed to take the post of Ákeri. Three years later (1787), another attack from Kolhápur was more successful. The forts of Narsinggad, Nivti, and Vengurla fell, and to save it, Sidhgad had to be made over to Mádhavráv Peshwa. Getting help from the Portuguese, for which he had to pay by the cession of the Phonda district, Khem Sávant drove back the Kolhápur troops, and recovered Nivti and Vengurla. In 1793, the Peshwa restored Sidhgad, and about the same time, through Sindia's influence, Kolhápur gave back the fort of Bharatgad. Further reverses were in store for Khem Sávant. In 1803, the Portuguese overran and permanently annexed the districts of Dicholi, Sánkli, Pedna, and Phonda.

On Khem Sávant's death in 1803, as he left no male heir,² the succession was disputed by his two cousins, Som and Shrirám Sávant. Open hostilities went on for about a year, when (1804) Som Sávant and all his sons, except Phond Sávant, were blockaded at Vádi, and the fort catching fire, perished in the flames. Phond Sávant, the surviving son, unable to cope with Shrirám Sávant, retired to Kolhápur. Here he was treated with much respect, and with the help of a body of Kolhápur troops, seized the town of Kudál and laid the country waste. On this the regent Lakshmibái, one of Khem Sávant's widows, agreed that Phond Sávant should return to Vádi and be restored to his father's rights. On his return Phond Sávant had so much influence with Lakshmibái, that Shrirám Sávant, after securing Hanmantgad and Bándá for his two illegitimate sons, was forced to leave Vádi. Two years later (1805), defeating a joint attack by Phond Sávant and Durgábái, Shrirám Sávant entered Vádi in triumph, imprisoned his opponents, and forced Lakshmibái to adopt his son Rámchandra as chief. Shrirám Sávant died in 1806.

¹ Aitchison's Treaties, IV. 443.

² Grant Duff (244) says that he had only one son by his third wife Devibái.

After his death the Kolhápúr chief, seeing the distracted state of Vádi, attacked and carried the forts of Bharatgad and Nivti, and established the port of Nandugad. In 1807, Phond Sávant, who, since 1805, had taken refuge at Kudál, returned to Vádi. The government directed by Rámchandraráv, Durgábái's brother, carried on incursions to the gates of Málvan, laid in ashes the village at the Málvan pass, and recovered the forts of Yashvantgad and Nivti. To repel these depredations the Kolhápúr chief took the field in person, defeated the Vádi army at Chaukuli, and blockaded the capital. In 1808, the Vádi government called in the aid of Áppa Desái Nepánikar, who sent a force to raise the siege of Vádi, and by invading Kolhápúr, forced the chief to retire. On his withdrawal, the Nepáni general took possession of the whole Vádi territory, placed Lakshmibái and her adopted son under surveillance, and took the forts of Yashvantgad, Vengurla, and Nivti. Still Phond Sávant by no means gave up hopes of recovering his power. Conspiring with Lakshmibái and Durgábái, he procured the murder of the young chief, and shortly after, by ill-treatment, caused the death of Lakshmibái, and rejecting Durgábái's claims to be regent, attacked and defeated the Nepáni army, and established himself as ruler. During these years of disorder the Vádi ports again swarmed with pirates. So severely did British commerce suffer, that in 1812 (October 3), Phond Sávant was forced to enter into a treaty, ceding Vengurla fort to the British and engaging to give up all his vessels of war.¹

Soon after the conclusion of this treaty, Phond Sávant died, and as his son Khem Sávant or Bápu Sáheb was a minor, Durgábái was appointed regent. In 1813, Durgábái seized the forts of Bharatgad and Narsinggad, which some few years before had been wrested from Vádi by Kolhápúr. The British had, meanwhile, guaranteed to defend Kolhápúr territory against all attacks, and as Durgábái obstinately refused to give up the forts, a British force under Colonel Dowse recaptured them and restored them to Kolhápúr. In consequence of Durgábái's refusal to cede the Kolhápúr forts and to exchange some districts north of the Kudál river for the lands held by the British south of that river, war was declared and the districts of Varád and Máland seized. At this time the widow of Shrirám Sávant caused fresh troubles by putting forward a person who claimed to be Rámchandra Sávant, who, she alleged, had not been murdered in 1807. Her cause found many supporters who moved about the country plundering on their own account. Such mischief did they do that many of the people, leaving their homes, sought safety in British and Portuguese territory.² Durgábái, now brought to great straits, offered to adjust all causes of quarrel, if the British Government would interfere on her behalf. Her

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History.

Rámchandra
Sávant II.,
1805-1808.

Phond Sávant III.,
1808-1812.

Khem Sávant IV.,
1812-1867.

Durgábái Regent,
1812-1819.

¹ Supplementary articles, absolutely ceding Redi and Nivti, abstaining from hostilities with other states, and submitting all disputes to the arbitration of the British Government, which in return guaranteed the chief's possessions against all foreign powers, were intended to be inserted. But as these terms were thought to interfere with the Peshwa's authority over Vádi, they were abandoned. Aitchison's Treaties, IV. 436, 447.

² Hamilton's Des. of Hindustán, II. 21

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Khem Sávant IV.,
1812-1867.

British Treaty,
1819.

proposals were declined. But even without British help her party were again successful, and order was for a time restored. In 1817, in consequence of a Portuguese raid into Usap, the Portuguese fort of Tirákol was plundered. In revenge the Portuguese attacked Redi, but after a fruitless siege of twenty-seven days, were forced to withdraw. About this time the Vádi nobles who held the forts of Bánda, Nivti, and Redi, became unmanageable, set the chief's authority at naught and plundered in all directions, including the surrounding British territories.

During the final British war with the Peshwa (1817), Durgábái threatened to invade British territory, and tried her best to aid the Peshwa's cause. Even after the Peshwa's overthrow her raids into British territory did not cease. War against Sávantvádi could be put off no longer, and in 1819, a British force, under Sir W. Grant Keir, took the forts of Yashvantgad and Nivti. At this time Durgábái died, and the regency was divided between the two surviving widows of Khem Sávant III. The new regents gladly accepted the British terms. A treaty was concluded in which the British promised to protect Sávantvádi, and the regency acknowledged British supremacy, agreed to abstain from political intercourse with other states, to deliver to the British Government persons guilty of offences in British territory, to cede the whole line of sea coast from the Karli river to Portuguese boundaries, and to receive British troops into Sávantvádi.¹

In 1820, Captain Hutchison was appointed Political Agent, and except Redi and Nivti, the whole district ceded in 1815 was restored to Vádi.² In the same year the Political Agent settled a dispute with Kolhápúr about the Manohar division, deciding that ownership vested in the Vádi chief, and fixing the Kolhápúr claims to share in the revenue.³ In the latter part of 1820, the Agency was transferred to the Ratnágiri Judge, from whom, in 1822, it went to the Collector. In 1822, it was settled that the Kolhápúr chief, instead of making collections from different parts of the state, should receive a yearly sum of £783 (Rs. 7830). In 1822, the regency was abolished and Khem Sávant was installed. He soon showed himself weak and incompetent, unable to check his turbulent followers or fulfil his engagements with Kolhápúr. In 1830, and again in 1832, a British force had to be called in to put down rebellions caused by the chief's oppression and injustice. On the second occasion, Khem Sávant was required to execute a treaty by which he bound himself not to remove his minister without the sanction of the British Government; to adopt such measures of reform as the British Government might approve; and to pay the cost of any troops required for the settlement of his affairs.⁴ Even with British help, Khem Sávant was unable to keep order. His nobles were practically independent, and in 1836, broke into a revolt to put down which British troops had again to be called in. In this year (1836) the customs leviable

British Aid,
1830.

¹ Aitchison's Treaties, IV. 436, 448.

² Aitchison's Treaties, IV. 451, 450.

³ Aitchison's Treaties, IV. 450.

⁴ Aitchison's Treaties, IV. 437, 405.

on the military road from Vengurla to the Rám pass were transferred to the British, and two years later (1838) transit duties were abolished and the whole of the Vádi customs made the property of the British Government. Meanwhile Khem Sávant's affairs went from bad to worse. His carelessness and misrule provoked another outbreak. The British were called in, and deposing Khem Sávant, took the management of the state into their own hands.¹

A Political Superintendent was appointed and a military force known as the Sávantvádi Local Corps, under the command of British officers and maintained at the expense of the state, was organized. The turbulent nobles several times rebelled. In 1839, some malcontent state servants, losers by reductions in public expenditure, went to Goa, and from Goa twice invaded Vádi, succeeding on one occasion in surprising Vádi fort and carrying off the chief and his family. These disturbances were soon repressed, and order was established, grievances redressed, and public expenditure curtailed. So successful was the management that before long the British troops were entirely withdrawn.

Order and progress lasted for a few years only. In 1844, the Political Superintendent heard from Belgaum that a serious disturbance had broken out in Kolhápúr. Measures were taken to prevent the insurgents from tampering with Vádi malcontents, and to watch the people of Manohar fort who were suspected of being ready to join the disturbance. In spite of these precautions, the people of Manohar openly espoused the rebel cause, made raids into the country round, burnt houses and villages, and had a skirmish with the Sávantvádi Local Corps. A detachment under Major Benbow, sent against the insurgents at Manohar, was threatened on all sides by a large body of rebels. The enemy's strength increased; the insurgents attacked the village of Dukánvádi, carried off a large quantity of grain, and threatened the people with violence. As disorder was now widespread, help was sought from Lieutenant-Colonel Outram, then on special duty at Kolhápúr, and a detachment of four companies of the Xth Regiment N. I. was sent to Vádi. They were met by a body of insurgents in the Ákeri pass, and after a few days' skirmishing, succeeded in driving them out.² Phond Sávant, one of the leading nobles, a man highly respected by the British Government, with his eight sons, joined the rebel cause. His example was followed by Ánna Sáheb the heir apparent, who, joining the rebel camp under a salute of guns, began to issue orders, and in spite of the efforts of the British officers, succeeded in collecting revenue from the villages round.³ Emboldened by their success, the rebels marched against the capital but were soon dispersed. They next tried, but without success, to win over the native officers of the Tenth Regiment. So far the efforts to put down the revolt had failed. In 1845, the whole country

Chapter VII.

History.

Khem Sávant IV.,
1812-1867.

*British
Management,
1838.*

*Disturbances,
1844-1850.*

¹ Aitchison's Treaties, IV. 456, 458. ² Service Record of Xth Regt. N. I. 13.

³ The secret cause of Ánna Sáheb's joining the rebels was Jámkibai, youngest wife of Phond Sávant. Her object was to get Ánna Sáheb to commit himself, and thus clear the way for her son's succession to the chiefship.

Chapter VII.**History.**

**Khem Sávant IV.,
1812 - 1867.**

*Disturbances,
1845 - 1850.*

was in disorder, even close to military forts there was no security of person or property. The wild wooded character of the country made the arrest of offenders most difficult. Martial law was proclaimed, and three strong detachments, one of them under Colonel Outram, were stationed in different parts of the district. In spite of these vigorous measures, the insurrection for a time made head. In Málvan, Subhána Nikam, a notorious leader, escaping from Belgaum, raised a revolt; in the north, Dáji Lakshman, a personal servant of Anna Sáheb's, headed a party of insurgents, collected the rents, and sent emissaries to realise the revenue even in the British districts of Varád and Pendur; and in the east, on the Rám pass road, one Har Sávant Dingnekar, heading the discontented Desáis of Usap and Havelkar, threatened the Bhedshi outpost. These successes did not last long. Near Ránga fort a detachment of troops surprised and routed a body of insurgents; at Pátia the rebels met with another severe reverse; and Colonel Outram, attacking and taking Manohar fort, closely pursued the insurgents into Portuguese territory. The spirit of the revolt was broken. The common people, on promise of pardon, deserted in numbers and returned to their homes, and the leaders sought safety within Portuguese limits. Several applications were made to the Goa government to prevent the rebels from taking shelter in their territory. But the government refused to give them up. At last, in 1847, ninety-two of the fugitives joined in petitioning the Bombay Government, to grant them a pardon and allow them to return to their homes. In 1848, on the recommendation of the Political Superintendent, about forty-five of the rebels, among them Anna Sáheb, the Usap and Havelkar Desáis, and four sons and a grandson of Phond Sávant were, on furnishing good conduct security, allowed to return. All Anna Sáheb's claims on the Vádi state were declared forfeited. He was settled at Vádi with a monthly pension of £10 (Rs. 100), and shortly after the sons and grandson of Phond Sávant were each allowed a monthly pittance of 10s. (Rs. 5).

In 1850, when order was restored, the Court of Directors decided that though the conduct of the Vádi chief justified the British Government in annexing his dominions, he and his family should be supported by a fixed allowance, and that for a time the management should remain in British hands. During the Mutinies (1857), the chief and his son, Phond Sávant or Anna Sáheb, showed themselves loyal to the British Government. But the rebel noble Phond Sávant and those of his sons who were not included in the amnesty, and who were in Goa under surveillance, caused disturbances all along the forest country from Sávantvádi to Kánara. They attacked several of the Belgaum villages and burnt custom houses.

In 1861, on condition of paying £55,000 (Rs. 5,50,000), the charges of the 1844 revolt,¹ and a succession fee of one year's revenue, and of promising to protect his subjects and meet the expense of a British Resident and his establishment, Phond Sávant or Anna

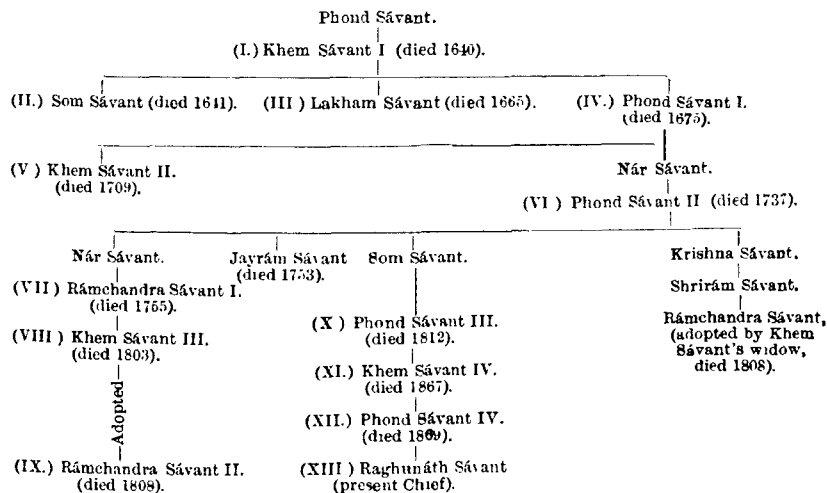
¹ In 1862, the debt amounting to about £55,000 (Rs. 5,50,000), was paid off.

Sáheb was pardoned and recognised as heir. In 1867, on the death of his father, Phond Sávant succeeded.¹ His feeble character and fondness for opium made it unsafe to trust him with power. To prevent mismanagement, he was required to accept the scheme of administration introduced by the British Government, to refrain, except with the previous sanction of the paramount power, from making any organic changes, and to submit for approval the name of any one whom he wished to appoint minister.

In 1869, before these terms were formally concluded, Phond Sávant died, leaving the present chief Raghunáth Sávant a child six years old. During his minority the administration has been in the hands of the British Government. In 1877, the young chief, who had before been studying with the Kolhápúr Rája, was sent to the Rájkumár College at Rájkot. In the same year (1877), Sávantvádi was included among the minor states of the Bombay Presidency that were placed under the control of the Commissioner of the Southern Division. The appointment of a judicial assistant was made permanent, and the post of native assistant, *daftardár*, was abolished and his duties transferred to a minister, *kárbhári*, whose office was revived. In 1878, the young Sar Desái received in full Darbár the Delhi banner sent by the Viceroy in commemoration of the assumption of the title of Empress of India. In 1879, he was married to the daughter of the late Khanderáv Gaikwár of Baroda.

The chief, a Hindu of the Marátha caste, is entitled to a salute of nine guns. The family have a patent allowing adoption, and in point of succession follow the rule of primogeniture. Besides an infantry corps 436 strong, he maintains three guns and twenty horsemen.

The family tree of the Vádi chiefs is as follows :



Chapter VII.

History.

Phond Sávant IV.,
1867 - 1869.

Raghunáth
Sávant,
1869.

¹ The prescribed present, *nazarána*, was levied from him.

CHAPTER VIII.

LAND ADMINISTRATION.

Chapter VIII.
Land
Administration.Staff,
1879.Village
Headmen.

For fiscal and other administrative purposes the state lands are distributed among the three divisions, *petás*, of Vádi, Bánda, and Kudál. Under the supervision of the Political Superintendent, the revenue and magisterial charge of each of these fiscal divisions is placed in the hands of an officer styled *kamávísár*, with a yearly salary varying from £60 to £84 (Rs. 600 - Rs. 840).

In revenue and police matters, the charge of the 223 state villages is entrusted to hereditary headmen, *gávkar*s, chosen from the Marátha, Bhandári, or Gaud Bráhma caste, and paid on an average about £3 (Rs. 30) a year.¹ Each village has generally more than one *gávkar*, who exercise their powers by turns fixed according to their share, each sharer, after one or two years, resigning office in favour of the next claimant. Each headman is responsible to the state for a fixed yearly sum on account of his village. Until 1853 he had power to dispose of abandoned, or *gatkul*, holdings. Since then his power has been restricted to making such arrangements, with respect to their cultivation, as will enable him to pay the revenue during his term of office. The reason of this restriction is, that as thrown up lands become the property of the state, if they are alienated or permanently settled at a rental less than their assessment, the state revenue suffers. Under the old system, when the alienating headman's term of office ended, his successor might object to pass the agreement for the full amount of revenue, and the village might have to be managed direct by the state.

Village
Constable.

The village constable, *faujdar*, is not an hereditary officer. He is generally chosen from the family of the village headman, and is equal in rank to a police patel in a British village. His office is honorary and has no pay attached to it. Under the headmen the accountants, *kulkarnis*, keep the village papers and draw up statistical and other returns. There is one accountant for every peasant-held, *kulúrgi*, village, containing on an average 850 inhabitants, and yielding a yearly average rental of about £90 (Rs. 900). Their yearly salaries, paid in cash, varying from 10s. to £7 (Rs. 5 - Rs. 70) and averaging £2 10s. (Rs. 25), represent a total yearly charge of £466 (Rs. 4660). Under the headmen, the village accountants and the village constables are the village servants or *virtiks*, styled *ghádi*, *decli*, *bhúvin*, and *mhar*. Besides for revenue and police duties these men are liable for miscellaneous public business. They receive a certain share of grain, *baluta*, from the people, but enjoy neither money nor land grants from the state.

¹ The pay varies from 10s. to £7 (Rs. 5 - Rs. 70) and averages about £3 (Rs. 30)

The yearly cost to the state of village establishments amounts to £695 (Rs. 6950), of which £229 (Rs. 2290) are paid to village headmen and £466 (Rs. 4660) to village accountants. This represents a charge of £3 (Rs. 30) on each village or $2\frac{3}{4}$ per cent of the entire land revenue.

The earliest revenue system of which record remains is that of the Bijápur kings (1500-1670). Under their system the amount of the government demand depended on the quantity of seed used in sowing the different kinds of land. The crops were divided into wet *pársáli*, after-crops *vidal*, and irrigated *gimvas*. Other lands were hilly, *bharad*, *dongar* or *varkas*. The government share is said to have been originally one-fifth or one-sixth of the whole produce. The assessment on garden, *bágáyat*, lands planted with cocoa and betelnuts was fixed on the number and productiveness of the trees. The money rate or assessment on each cocoanut tree represented about one-half of the gross produce. Betelnut or *supári* trees, of much more delicate growth, yielding from twelve to twenty *shers*, were taxed at one-third and in some cases as low as at one-fourth of the whole produce.¹

Early in the eighteenth century (1715) the former rates were revised by a clerk named Ganorám. Under his arrangements wet rice land was divided into four classes. Of these, land of the first quality, *shel*, was taxed at one-sixth of the produce; land whose crops required transplantation, *lárni*, at one-eighth; poor land, *bharad*, at one-tenth; and hill lands and those which after one or two crops required to be left fallow, *varkas*, at one-twelfth of the produce. Irrigated, *gimvas*, lands yielding one crop were taxed at one-eighth; those yielding two crops at one-tenth of the produce; and *lhovi* lands yielding a dry season crop of *náchni*, Eleusine corocana, at one-twelfth. Of cocoanut lands the sea shore, *velúgar*, gardens were rated at two-fifths of the produce, and river bank, *thalúgar*, gardens at three-tenths. Irrigated, *kulúgar*, lands paid one fourth, and lands watered by manual labour, *ádúgar*, about one-seventh. On betelnut lands the rates varied from one-sixth to one-eighth of the produce. Besides the assessment certain cesses which are still in existence were levied.² In 1791, in part payment of the rice assessment, such articles as clarified butter, oil seeds, and pulse were taken. The object of this change was that those articles might be stored in the state granaries or supplied to the stud or to ships, or be available for the use of the chief's family. In 1849, Major Jacob substituted cash for kind payments, and fixed rates of commutation on the average of prices for seven years (1842 - 1849).

There are four land tenures, state, alienated, rented, and peasant-held. State lands are of two kinds: crown lands, *sheri thikáns*, and private, *khásgi*, lands, the personal property of the chief.

Chapter VIII.
Land
Administration.

Administration.

Land Tenures.

¹ Jervia' Konkan, 101-103.

² There are cesses on all lands including the chief's private, *sheri* and *khásgi*, lands, and on goldsmiths, carpenters, blacksmiths, native Christians, shopkeepers, painters, milkmen, shepherds, sellers of opium, liquor, honey, wax, and fireworks, the producers of flax and catechu, and the rearers of pigs.

Chapter VIII.

Land
Administration.

Land Tenures

Grantees

Renters.

Peasant
Holders.

These are managed by the district revenue officers, and are by them let to the highest bidder for a fixed term of years. Alienated lands are classed under three heads, grant *inám*, rent-free *dastibád*, and religious *dersu*. Grant, *inám*, lands, including *dumála* or lands belonging to the chief's relations, are held under deeds, *sanads*, either in perpetuity or during the lifetime of the holder, free of all state claims. Rent-free, *dastibád*, lands are rare. Though free from assessment they may be liable to the payment of certain cesses. Religious, *dersu*, lands, assigned to temples and temple servants, are of two kinds, *inám dersu*, absolutely alienated, and *dersu kumle*, held subject to the payment of the government assessment. These lands are cultivated sometimes by the proprietors and sometimes by the state, and after deductions their produce is assigned for the use of the temple. The very few rented, *khoti*, lands are similar to those in Ratnágiri. The *khots*, or *nádkarnis* as they are locally called, belong to the Gaud Bráhma caste and are hereditary holders. They are revenue farmers, and in some villages which contain rice lands they are peasant-holders. Very few of them have groups of villages. The *khots* hold villages under a right locally known as *palav*, a term supposed by the Political Superintendent to be a corruption of the English word plough. Under this tenure, though there may be no grant confirming it, the *khot* is allowed to till a certain area of land as his own. They let hilly, *varkas*, lands to their tenants-at-will, *kevikuls*, from whom they receive 2s. on every 240 pounds (Re.1 the *khandi*) of the produce, the amount of which is settled by estimate. The rent recoverable from peasant-holders is fixed. In *khoti* villages there are no under-holders between the peasant-holders, *khatelis*, and the tenant-at-will, *kevikuls*. *Khots* are allowed to recover only very limited and trifling cesses. They are accountants in their villages, and their estates are not divided among the co-sharers, but held in turn. They are not well off, but in good seasons their profits vary from ten to fifteen per cent above the government demand.

Under-cultivators are of two classes, peasant-holders, *khatelis*, and yearly tenants, *kevikuls*. The peasant-holders, who belong to almost all castes, are responsible to government for the assessment on their lands. Failing to pay they are ousted and their lands are sold. There are many *khatelis* in *kulárgi* villages, but no village is entirely cultivated by them. Some of the *khatelis* are hereditary holders, *catulárs*, who live in towns and villages and pay their assessment direct to the revenue officials. Some of them have large holdings, which they till by the help of tenants engaged from the peasantry of the village. But as a rule their holdings have been greatly reduced by sub-division. In *khoti* villages, though older than the *khots*, the peasant-holders, *khatelis*, are very few and badly off. The other class of under-holders are yearly tenants, *kevikuls*, who every year make an agreement with the superior holder, either *khot* or *khátedár*, to pay a certain quantity of grain. They generally belong to the Marátha and Bhaudári castes, but a few are native Christians and Musalmáns. Most of them were originally peasant-holders, who have alienated their occupancy rights and rent lands

from the alienees or others. Beyond a fixed rent, which is in kind on rice lands and in money on hilly and garden lands, they do not pay any extra cesses. Varying according to the soil and the labour and manure used, the rent is sometimes one-fourth, sometimes one-third, and sometimes one-half of the whole crop. They do not wander from place to place, and seldom have any disputes with their landlords about rent. There is not enough competition among them to enable the upper holders to exact rack-rents.

The revenue survey, begun in 1872, has been introduced into the Kudál and Vádi sub-divisions. Up to 1st April 1880, 361,530 acres were surveyed, and 303,770 acres classified. In the Kudál division survey rates, guaranteed by the state for fifteen years, have been introduced and the villages classed into four groups. In the first group the maximum acre rates are, for rice land 13s. (Rs. 6½), hilly 6d. (*annas* 4), and garden, *bágáyat ágri*, £1 4s. (Rs. 12); in the second group, for rice land 11s. (Rs. 5½), hilly 4½d. (*annas* 3), and garden, *bágáyat ágri*, £1 4s. (Rs. 12); in the third group, for rice land 9s. (Rs. 4½), hilly 3d. (*annas* 2), and garden, *bágáyat dongri*, 16s. (Rs. 8); and in the fourth group, for rice land 8s. (Rs. 4), hilly 1½d. (*anna* 1), and garden, *bágáyat dongri*, 16s. (Rs. 8). These assessment rates gave a yearly increase of £205 (Rs. 2050) to the state revenue. The total cost of the survey up to 31st March 1880 was £22,177 (Rs. 2,21,770).

According to the present system of collecting the revenue, except in survey settled villages where the amount is fixed for a term of years according to the position of the field and the character of the soil, at harvest time a state officer comes to each village and with the headman and accountant he goes to the different crown hill lands, estimates their total produce, fixes a half of the whole as the state due, and commutes this share to a certain sum of money. The value of the grain is then either paid to the state by the tenants at fixed market rates or it is sold to the highest bidder by public auction. If the husbandman refuses to pay, part of his grain is taken and sold for the benefit of the state. Village renters and peasant-holders seldom fail to pay the state demands. When they fail their property is seized and sold. If this is not enough, and if the defaulter is a peasant-holder, *khateli*, the occupancy right is sold, but this rarely happens. Superior holders are helped by the district revenue officers in recovering rent from their tenants. The rent is collected by four instalments, in November, January, March, and May. The tenants pass bonds for arrears, and remissions are rarely granted.

In 1878, seventeen estates were managed by the Political Superintendent on behalf of minor proprietors, *sardárs*.¹ The aggregate income of thirteen of these estates, which were too poor to supply the minors with the necessities of life, amounted in 1878 to £54 (Rs. 540). The income of the four remaining estates, most of which are unencumbered, was £1913 (Rs. 19,130) and the expenditure £927 (Rs. 9270).

¹ These minors are now being taught in Government schools.

Chapter VIII. Land Administration.

Survey Rates.

Rent How Realised.

Wards.

CHAPTER IX.

JUSTICE.

Chapter IX.

Justice.

Civil.

BEFORE 1842, including revenue courts empowered to hear rent suits, there were two civil tribunals, the Chief's court and the magistrate's, *mansabdār's*, court. The Chief's court, with a bench of three judges,¹ decided all cases after consulting a council, *panch*, of persons of rank and influence. The magistrate, *mansabdār*, was a police officer who received petitions and forwarded them to the chief for disposal. In 1842 the Chief's court was abolished, and a new court established under a single native judge, *nyáyádhish*, with jurisdiction over the Bánda and Vádi divisions, and the town of Vádi.² All suits were first brought before the Superintendent who referred them to the *nyáyádhish* for investigation. Unless appealed against within thirty days his decree was final. In cases worth £50 (Rs. 500) and upwards where he reversed the original decree, and of £100 (Rs. 1000) and upwards where he confirmed it, an appeal, if made within ninety days, lay from the Superintendent's decision to Government. A fee was levied when payable by the plaintiff in proportion to the amount claimed, and when payable by the defendant in proportion to the amount decreed. On suits withdrawn, one-half, and on suits struck off, from one-half to two-thirds of the regular fee were levied. In 1858, a court, with jurisdiction over the whole of Kudál and thirteen villages of Vádi, was established under a native subordinate judge, *munsif*.

In 1878, three civil courts exercised original, and one, that of the Political Superintendent, exercised appellate jurisdiction. The original courts were the court of the *nyáyádhish* at Vádi for the disposal of regular suits; the court of the subordinate judge, *munsif*, at Kudál for regular suits and small causes not exceeding £2 (Rs. 20) in value; and the court of the judicial assistant political superintendent who, besides settling small cause suits³ up to £50 (Rs. 500), hears such appeals from the *nyáyádhish* and the *munsif*, as the Political Superintendent may transfer to him.

Civil Statistics.

The average distance of villages from the nearest courts is eight miles, and the average number of suits filed during the five years ending 1878, was, including small cause suits, 2585; during the same period the average number of cases, including arrears, disposed of

¹ It was, for this reason, known as the *Tirait* court.

² Some thirteen villages in the Vádi division were not under the jurisdiction of this court.

³ The court of the judicial assistant political superintendent, temporarily opened in 1874 for disposing of arrears of appeals, was converted into a court of small causes.

was 2655. The highest number of cases filed was 2824 in 1877, and the lowest 2142 in 1878. Of cases disposed of the highest was 2933 in 1877, and the lowest 2545 in 1878. The average number of appeals filed during the same five years was 130; of appeals decided either by the Political Superintendent or his judicial assistant, 217; and the average value of suits £4 8s. (Rs. 44). During the same period, 374 applications for the execution of decrees were on an average disposed of. In 1878, the average duration of suits was one month in the judicial assistant's court; two years in the court of the *nyáyádhish*; and in the *munsif's* court, nine months in the case of regular suits and two in small causes. In 1878, the total sum realised from these courts amounted to £2065 (Rs. 20,650), and the charges to £1378 (Rs. 13,780). The proportion of suits to population was one suit to every eighty-nine persons.

There is registration¹ enough to employ two sub-registrars and one chief registrar. These officers are distributed one at each of the three sub-divisions of Vádi, Bándá, and Kudál. The duties of the chief registrar, formerly performed by the secretary, *daftardár*, are now assigned to the state minister, *kárbhári*, whose office is at Vádi. In 1878, the registration receipts amounted to £974 (Rs. 9740) and the charges to £157 (Rs. 1570), leaving a balance of £817 (Rs. 8170). The number of documents registered was 3088, and the value of the total immovable property transferred was £32,029 (Rs. 3,20,290).

In 1790 there were two magisterial tribunals, the court of the Chief and the court of the magistrate, *mansabdár*. In 1842 the state was divided into three parts, and each placed under a manager, *kamávísdúr*, who, besides hearing land and rent suits, was invested with magisterial powers of simple imprisonment up to twenty days and of fine up to £1 10s. (Rs. 15). The constable, *kotwál*, of the town of Vádi had like powers within its limits; serious cases were transferred to the Political Superintendent, who decided them by the help of three assessors chosen from among the state officers or nobles, *sardúrs*. In 1870 the number of criminal courts was raised from six to eight. At present (1878) there are seven criminal courts, that of the Political Superintendent exercising the powers of a Sessions Judge; of the assistant political superintendent having the powers of a first class magistrate; of the state minister, *kárbhári*, invested with the powers of a district magistrate; and of the second class magistrates of the Vádi, Bándá, and Kudál sub-divisions, and of the town of Vádi. In 1878, the Political Superintendent decided thirteen original and seventeen appeal cases, the district magistrate fourteen, and the second class magistrates 369. The most common offences are theft, hurt, housebreaking, criminal assault, and breach of trust.

Chapter IX.

Justice.

Civil Statistics.

Registration.

Criminal Justice.

¹ In 1875, the registration department established by Khem Savant Bhonsle in 1833 was remodelled. Under the old registration system, sale deeds at the rate of five per cent, and mortgage deeds at the rate of 2½ per cent, of the aggregate value of the property, were compulsory. Under the new system compulsory registration extends to deeds of gift, sale, partition, adoption, and wills. The registration of bonds is optional.

Chapter IX.**Justice.****Police.**

In 1834-35, village headmen performed the duties of village constables. As all were unpaid they showed little energy, and the Goa territory afforded every facility for criminals to avoid arrest. In 1839, for the maintenance of order, the British Government raised a local corps for service within the limits of the state. Besides this corps, the only police was a militia of grant-holding, *sanadkari*, sepoys who were required to serve one month in the year. In 1842, the state was divided into three districts, and each placed in charge of a police officer with a number of peons who acted as constables. In 1870, the corps was recognised as a police force, and a number of men were placed under the police officers of the several districts, for duties previously performed by messengers whose services were dispensed with. In 1874 three chief constables were appointed, and each placed in charge of a division, *peta*, with a suitable number of head constables and constables stationed in twelve different posts, six in Vádi, three in Bánda, and three in Kudál. At each station the party has eight or ten villages allotted to it.

**Cost,
1878.**

In 1878, the total strength of the Vádi local corps was 437, of whom seven were officers and 430 non-commissioned officers and privates. Of the total number of men in the local corps 152 were continuously employed on police duties. Except a small detachment furnished from the Sar Desái's bodyguard, there is no mounted police. Taking 900 square miles as the area of the state and 190,814 as its population, the strength of the Vádi police is one man to every 5.92 square miles and 1255 souls. In 1878, the total cost was £2957 (Rs. 29,570) or £3 (Rs. 30) a square mile, or nearly 3*d.* (2 *annas*) a head of the population.

**Working,
1878.**

In 1878, the proportion of crime to population was one offence to every 370 persons, and the percentage of persons convicted was 0.23 of the population. Of 610 accused persons, 453 or 70.7 per cent were convicted, and of £373 (Rs. 3733) worth of property alleged to have been stolen, £155 (Rs. 1549) or 41.5 per cent were recovered.

Jail.

Besides the lock-ups at Bánda, Vádi, and Kudál, for prisoners sentenced to terms of imprisonment for a week, there is only one jail in the state. The Vádi jail, an old cramped native building of stone and mud, roofed with tiles and bamboos, is situated on the lowest level of the fort, and by the fort walls is almost entirely shut out from currents of air. The enclosure, containing six cells with one or two double-grated windows in each and fronted by an open space is 188 feet by 87. In 1878 it had a total population of 207 prisoners and a daily average of fifty-six. The prisoners are employed partly in out-door labour, in carrying out local public works, and partly in-doors, in basket, cane, coir and matting work, and the tinning of copper vessels. The total cost in 1878 was £680 (Rs. 6800), and the cost per head £12 (Rs. 120). The proceeds of the jail manufactures amounted to £140 (Rs. 1400).

¹ This does not include the cost borne by the British Government for men stationed at Doramarg to collect the customs revenue.

CHAPTER X.

REVENUE AND FINANCE.

THE earliest year for which revenue figures are available is 1790, when the receipts amounted to £24,284 (Rs. 2,42,840) and the charges to £26,218 (Rs. 2,62,180). Sixty years later (1850) the receipts had risen to £27,424 (Rs. 2,74,240) and the charges fallen to £17,938 (Rs. 1,79,380). The earliest available balance sheet, that for 1860-61, shows a total revenue of £23,158 (Rs. 2,31,580), and a total expenditure of £23,636 (Rs. 2,36,360); the total revenue for 1878-79 amounted to £35,300 (Rs. 3,53,000), or, on a population of 190,814, an incidence per head of 3s. 3½d., and the charges to £30,375 (Rs. 3,03,750).

Land revenue receipts, forming 57·3 per cent of £35,300 (Rs. 3,53,000) the entire state revenue, have risen from £16,354 (Rs. 1,63,540) in 1860-61 to £19,280 (Rs. 1,92,800) in 1878. The rise in land revenue is owing to increased produce consequent on improved modes of tillage, and to the partially introduced revenue survey. The increase in charges, from £2124 (Rs. 21,240) in 1860-61 to £4997 (Rs. 49,970) in 1878, is due to a rise in the salaries of revenue officers and to revenue survey operations, which, in 1878, cost £1926 (Rs. 19,260).

Stamps are a new head since 1860-61. The 1878 stamp receipts, including court fees, amounted to £71 (Rs. 710).

Excise receipts, which in 1860-61 were £997 (Rs. 9970), have risen to £1918 (Rs. 19,180) in 1878.

Law and Justice receipts have risen from £973 (Rs. 9730) in 1860-61 to £1813 (Rs. 18,130). The 1878 charges were £3217 (Rs. 32,170) against £2391 (Rs. 23,910) in 1860-61.

Forest receipts have risen from £209 (Rs. 2090) to £328 (Rs. 3280), and forest charges, owing to the increased strength of the establishment, from £78 (Rs. 780) to £158 (Rs. 1580) in 1878.

The compensation paid yearly to the state for customs collected by the British Government is fixed at £2027 (Rs. 20,270).

Salt receipts amounted in 1878 to £566 (Rs. 5660) against £340 (Rs. 3400) in 1860-61, and the charges to £82 (Rs. 820) against £60 (Rs. 600).

Registration receipts amounted in 1878 to £939 (Rs. 9390) against £391 (Rs. 3910) in 1860-61 and the charges to £122 (Rs. 1220).

Chapter X.
Revenue and
Finance.

Land Revenue.

Stamps.

Excise.

Justice.

Forest.

Customs.

Salt.

Registration.

Chapter X.
Revenue and
Finance.

Military and
Police.

Jail.

Balance
Sheet.

On account of the increase in the number of schools and scholars, education receipts have risen from £13 (Rs. 130) in 1860-61 to £139 (Rs. 1390), and the charges from £176 (Rs. 1760) to £882 (Rs. 8820).

Military and Police charges have fallen from £5760 (Rs. 57,600) in 1860-61 to £4457 (Rs. 44,570) in 1878.

Jail charges have risen from £317 (Rs. 3170) in 1860-61 to £380 (Rs. 3800) in 1878.

The following statement gives a detailed comparison of the 1860-61 and 1878-79 balance sheets :

Savantrādi Balance Sheet, 1860-61 and 1878-79.

RECEIPTS.			CHARGES		
Heads.	1860-61.	1878-79.	Heads	1860-61.	1878-79
	£ s.	£ s.		£ s.	£ s.
Land Revenue	16,353 16	19,259 0	Land Revenue	2123 4	4997 10
Stamps		71 4	Law and Justice	2301 6	3217 8
Excise	907 8	1913 8	For-est	73 2	158 6
Law and Justice	973 10	1812 14	State Expenses	3296 2	6862 16
Forest	209 4	328 8	Military and Police	5759 16	1456 13
Customs	2027 4	2027 4	Jail	317 2	379 13
Salt	339 2	565 16	Education	175 13	882 8
Registration	391 6	933 14	Medical	372 2	736 13
Education	12 14	149 2	Charitable Allowances	1555 10	1252 6
Interest		654 0	Solt	60 4	82 8
Advances and Loans		1810 4	Registration		122 6
Local Funds		2708 0	Payments to States(a)	1158 2	1211 14
Miscellaneous	1554 6	3215 14	Public Works	513 4	1463 3
			Advances and Loans	4479 16	1152 13
			Local Funds		2700 8
			Miscellaneous	1346 4	751 2
Total	23,158 10	35,299 8		24,676 12	39,375 8

(a) These are yearly payments to Kolhapur and Ichalkaranji for certain rights they formerly held on some Vādi villages.

Local Funds.

Local Funds collected since 1877 to promote education and works of public use, amounted in 1878 to £2508 (Rs. 25,080). The 1878 expenditure was £2700 (Rs. 27,000). The revenue is derived from five sources, a local cess of one-sixteenth of the land revenue, the proceeds and cash balance of the tolls, except those paid to the British Government or to Kolhāpur, and the receipts from ferries, cattle-pounds, and village school fees. The local cess, of which two-thirds are set apart for a road fund and one-third for a school fund, yielded in 1878 a revenue of £1600 (Rs. 16,000). The receipts from toll and ferry funds, cattle-pound fund, and school fee fund amounted to £695 (Rs. 6950), contributions yielded £155 (Rs. 1550), and miscellaneous sources £57 (Rs. 570), making a total of £2508 (Rs. 25,080).

For administrative purposes the local funds of the state are divided into two main sections, one set apart for public works and the other for instruction. Under these two heads the receipts and disbursements during 1878-79 were as follows :

Sāvantvādi Local Funds, 1878-79.

PUBLIC WORKS.

RECEIPTS.		EXPENDITURE.	
	£ s.		£ s.
Balance, 1st April 1878	4630 4	Establishment	155 14
Two-thirds of the Land Cess	1064 12	New Works	475 0
Toll and Ferries	593 5	Repairs	1443 4
Cattle Pounds	42 12	Miscellaneous	145 11
Contributions	155 0	Balance, 1st April 1879	4323 4
Miscellaneous	57 0		
Total	6542 13	Total	6542 13

INSTRUCTION.

RECEIPTS.		EXPENDITURE.	
	£ s.		£ s.
Balance, 1st April 1878	237 6	Inspection	26 2
One-third of the Land Cess	535 18	School Charges	418 18
School-fee Fund	59 4	Prizes and Furniture	13 10
		Miscellaneous	21 14
		Balance, 1st April 1879	352 4
Total	832 8	Total	832 8

The chief local fund works carried out since 1877, are a road 13½ miles long, six new shops, a toll-house, and two staging bungalows.

In 1877 a municipal committee was formed for the town of Vādi. The town duties and taxes on trade previously collected by the state, and the proceeds of the local cess were made available for expenditure on town improvements. No new taxes have been imposed. In 1878, including the balance at the beginning of the year, the total municipal revenue amounted to £222 (Rs. 2220) and the charges to £174 (Rs. 1740).

The following table gives the 1878-79 receipts, charges, and incidence of taxation :

Sāvantvādi Municipal Details, 1878.

NAME	POPULATION.	RECEIPTS							CHARGES							INCIDENCE.
		Balance.	Town Duties.	Trade Taxes.	Drug Fees.	Local Cess.	Miscellaneous.	Total.	Establishment.	Safety.	Health.	Repairs.	Miscellaneous.	Total.		
		£ s.	£ s.	£ s.	£ s.	£ s.	£ s.	£ s.	£ s.	£ s.	£ s.	£ s.	£ s.	£ s. d.		
Vādi.	8017	59 2	64 10	44 8	18 4	9 18	25 4	221 4	10 18	7 4	43 18	104 2	7 12	178 14 6		

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Revenue and
Finance.

Local Funds.

Municipality.

CHAPTER XI.

INSTRUCTION.

Chapter XI.

Instruction.

Schools,
1878-79.

Cost.

IN 1878-79 there were forty state schools, or an average of one school for every six inhabited villages, with 1869 pupils on the rolls and an average attendance of 1341·5 or 1·35 per cent of 99,082, the entire population of not more than twenty years of age.

Including superintendence and scholarship charges, the total expenditure on education on account of these forty schools amounted in 1878, to £1525 (Rs. 15,250). Of this £889 (Rs. 8890) were received from the state; £35 (Rs. 350) from public subscriptions; £187 (Rs. 1870) from fees and fines; and £414 (Rs. 4140) from local funds.

Staff.

Under a state inspector drawing a yearly pay of £30 (Rs. 300), the schooling of the state was conducted by a local staff of masters and assistant masters with yearly salaries ranging from £6 to £30 (Rs. 60-Rs. 300).

Instruction.

Of forty, the total number of state schools, one was an Anglo-vernacular school teaching English and Maráthi up to the standard required for the University entrance test examination; thirty-six were vernacular schools in which Maráthi was taught; and three in which Hindustáni was taught. Besides these there was a school for girls.

Progress,
1850-1877.

The following figures show the increased means for learning to read and write offered by the state to the people during the last twenty-seven years. In 1850 there was one Maráthi school in Vádi with 200 names on the rolls or 0·27 per cent of 73,481, the total population of not more than twenty years of age.¹ The school was maintained by the state at a yearly cost of £37 (Rs. 370). In 1854 there were two vernacular schools, one at Vádi paid by the state, and the other at Bánda, paid partly by the state and partly by the inhabitants, with 228 pupils on the rolls. In 1856, besides a vernacular school attached to the local corps, there were four schools with 352 pupils on the rolls the Vádi school teaching as far as algebra, geometry, and history. In 1860 there was one English school with a roll-call of twenty-three pupils or about 0·03 per cent, and five Maráthi schools,² including the local corps school, with a roll-call of 636 pupils or 0·9 per cent of the total population of not more than twenty years of age. In 1870 the number of schools was raised from six to twenty-three, with a roll-call of 1367 pupils or 1·4 per cent of the total population of not more than twenty years of age.

¹ This number is based on the census returns of 1851.

² The English and three of the Maráthi schools were supported entirely by the state and two received state aid.

The figures for 1878-79 were, as shown above, forty schools with a roll-call of 1869 names with an average daily attendance of 1341·5 or 1·35 per cent of 99,082 the total population of not more than twenty years of age. A comparison with the 1850 returns gives therefore for 1878 an increase in the number of schools of from one to forty, and from 200 to 1869 in the number under instruction.

In 1878 the number of girls' schools was the same as in 1870. But the attendance has considerably increased, the total number on the rolls rising from twenty-nine in 1870 to seventy-seven in 1878, and the average daily attendance from 40·6 to 55·06. The school is under the management of a mistress.

The 1872 census returns give, for each of the chief races, the proportion of persons able to read and write. Of 33,486, the total Hindu male population of not more than twelve years, 1191 or 3·56 per cent; of 14,659 above twelve years and not over twenty 1115, or 7·61 per cent; and of 41,202 over twenty years 3284 or 7·97 per cent were able to read and write or were being taught. Of 32,013, the total Hindu female population, 47 or 0·15 per cent; of 14,344 above twelve years and not over twenty, 12 or ·08 per cent; and of 46,785 over twenty years, 35 or ·08 per cent were able to read and write or were being taught.

Of 858, the total Musalmán male population not over twelve years, 61 or 7·11 per cent; of 307 above twelve years and not over twenty, 32 or 10·72 per cent; and of 888 over twenty years, 77 or 8·67 per cent were able to read and write or were being taught. Of 818, the total Musalmán female population not over twelve years, 25 or 3·06 per cent were able to read and write or were being taught.

In 1854 there were forty-seven private schools, sixteen in Vádi with 164 pupils, eleven in Báuda with 103 pupils, and twenty in Kudál with 322 pupils. These schools are supported from fees and are not regularly kept up.

In 1877, the native general library in the town of Vádi, established in 1852 with a commodious building erected partly at state expense and partly by subscriptions, contained 1097 volumes and had fifty-six subscribers. The total amount realised in 1878 was £118 (Rs. 1180), besides funds to the amount of £250 (Rs. 2500) invested in Government four per cent securities. In 1874 a reading room supported chiefly by state officials was opened at Kudál. The yearly subscriptions amounted to about £10 (Rs. 100). Sávantvádi has no newspaper, and only one press for lithographing official papers.

Chapter XI. Instruction.

Progress,
1850-1877.

Girls' Schools.

Readers and
Writers,
1872.

Musalmáns.

Village
Education.

Library.

CHAPTER XII.

HEALTH¹.

Chapter XII.

Health.

Diseases

THE prevailing endemic diseases are malarious fevers, stomach and bowel complaints, coughs, intestinal worms, itch, dysentery, and diarrhoea. To some extent chicken-pox, sporadic small-pox, measles, and venereal disorders are common among the people. Fevers are said to be commonest during the rains, intermittent fevers in May, June and July, and remittent fevers in August. In many cases fever is combined with cough, pneumonia, dysentery, and diarrhoea, and in some with enlarged spleen. The generality of fever cases are simple intermittent, quotidian, tertian, quartan, and remittent. Of the stomach and bowel complaints, more frequent in July, the chief are dyspepsia, colic, worms, constipation, dysentery, and diarrhoea. The last two, common among sepoys, prisoners and townsmen, and prevailing mostly in the rains, are mild, yielding to treatment and seldom fatal. Constipation, colic, and dyspepsia, common among the people, are traceable to their unwholesome diet, and in some measure to their dull and sedentary life.

The epidemics known to have prevailed within the past fifteen years, are cholera, fever, and dysentery. In 1859 cholera made its appearance, breaking out in July and continuing till October. Sixty-six of the town people appear to have died during the prevalence of the epidemic. Its chief feature was its resemblance to colic. A person attacked with it first complained of acute and severe pain in the abdomen, then he felt prostrated, the pulsation ceased, the skin grew cold and clammy, and two or three purgings and vomitings ended in death. It re-appeared in 1865 and lasted for about three months, but was confined to the town and its suburbs. About 137 cases occurred of which sixty-four or forty-seven per cent were fatal. The rainy months in 1863, 1864, and 1865 were characterised by a great prevalence of malarious fever. The tract of country to the south and east was the most affected. From the south the fever gradually spread as far north as Shivápur and the foot of the Haumant pass, apparently increasing at the opening of each rainy season and falling off at its close. Though the type of fever was mostly simple intermittent, it was of a greater strength than had ever before been known. It yielded to quinine and had no special peculiarities, but when the treatment was not long enough continued, relapses were common. The unseasonable fall of rain in these years had caused a scarcity of food, and the mass of the hill population, from want of proper nourishment, were pre-disposed to disease. The number of deaths in 1865 in the division of Vadi

¹ Contributed by Mr. Barjorji Ardesar, Assistant Surgeon.

was 1672 or two per cent of the population, in Bándá 260 or three per cent, and in Kudál 623 or one per cent. By some the fever was attributed to the ripening and subsequent decay of the bamboo brakes, which was said to have been one of the chief causes of the fever epidemic in north Kánara in 1862. In the opinion of the Political Superintendent it was a Kánara fever, and was introduced into Vádi by the labourers who went to Kánara for employment, when large public works were being carried out. In the 1873 rains, there was a great and general prevalence of dysentery and diarrhœa. About 850 cases were reported in the town of Vádi from June to September. Of these fifty-three, or about six per cent were said to have died. The disease was traceable to atmospheric causes, the monsoon being unusually unsteady.

In 1877 there were three hospitals and one dispensary. No dispensaries have been established in the district. But medicines, such as quinine and chlorodyne, are supplied to the chief constables, *faujdárs*, who sell them in the outlying villages. During 1879, 4935 persons, 672 of them in-door and 4263 out-door patients, against 6512 in 1878, were treated in the civil hospital. The average daily sick was of in-patients 2·4 per cent and of out-patients 58·9 per cent. The chief forms of sickness were malarious fevers, worms, diarrhœa, skin disease, bronchitis, and venereal affections. Nine major and 111 minor surgical operations were performed with success. The total cost was £679 (Rs. 6790) or 2s. 10d. to each patient. In the jail hospital, an upper-storied, boarded, and windowed building, with patient wards in the upper and lower stories, 216 convicts were treated in 1878 against 144 in 1877.

The total number of operations in 1879 was 3862, compared with 5181 primary vaccinations and 1077 re-vaccinations in 1873-74.

The following abstract shows the sex, religion, and age of the persons vaccinated :

Savantvadi Vaccination Details, 1873-74 and 1879-80.

YEAR.	SEX.		RELIGION.				AGE.		TOTAL
	Males	Females	Hindus.	Musal-máns.	Chris-tians.	Others.	Under one year.	Above one year.	
1873-74	2661	2520	5072	54	50	5	1247	3934	5181
1879-80	2050	1812	3447	81	73	261	1043	2819	3862

There are two chief forms of cattle disease, mouth and foot disease, *lág*, and cholera, *musla* or *bulki*. In the mouth disease, frequent in autumn, the mouth is swollen, sore, and ulcerated with a fetid discharge. Food and water are taken with difficulty. It is cured by rubbing the tongue with pepper and turmeric, *ámháhalad*. In foot disease, the feet swell, the hoofs rot and drop off, and the

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Health.
Diseases.

Hospitals.

Vaccination.

Cattle Disease.

Chapter XII.**Health.****Cattle Disease.**

parts are worm-eaten. The disease is common in summer, but in autumn is more serious. Though contagious it is not very fatal. The treatment is to give internally the slough of a serpent with plantains, while *kharsing* oil, lime, tobacco, tar, *dhimar*, and *pilkand* are externally used to the feet ulcers. The choleraic disease, from the dysenteric purge called *musla* or *bulki*, and also known as *mahirog* and *patki*, is of the same type as rinderpest. It is generally met with in summer and autumn. Originating partly from atmospheric influence and partly from bad food and water, its chief symptoms are refusal of food, shivering, and increased temperature of the body, enlargement of the papillæ at its root, a blue or black line on the tongue and the margins of the gums, fetid breath, husky cough, hanging down of the ears and running of the eyes and nose. These symptoms last for two or three days when diarrhœa sets in. In unfavourable cases, the purgings last for two or three days, the prostration increases, cramps in the legs follow, and the animal dies in a week, while in favourable cases the purgings cease in one or two days. In less serious cases the animal is branded in the dorsal regions and forehead, and is given the tender spike of the betelnut tree, cloves, mace, nutmeg, and brandy. In serious cases, the juice of the *korâla* creeper and of the bulb of *vachnûg* or *churka* is given in a pound of whey.

Births and Deaths.

The total number of deaths in the five years ending 1878-79 was returned at 19,188 or an average yearly mortality of 3897, or, assuming the figures of the census as a basis, of 2·05 per cent of the total population. Of the average number of deaths 2611 or 67·8 per cent were returned as due to fevers; 217 or 5·5 per cent to bowel complaints; 82 or 2·1 per cent to cholera; 19 or ·04 per cent to small-pox; 192 or 1·9 per cent to dysentery; and 725 or 18·6 per cent to miscellaneous diseases. Deaths from violence or accidents averaged 17 or 1·2 per cent of the average mortality of the state. During the same period the number of births is returned at 18,678 souls of whom 9895 are returned as male and 8873 as female children, or an average yearly birth-rate of 3735 souls, or, on the basis of the census figures, a birth-rate of 1·9 per cent of the entire population of the state.

CHAPTER XIII.

PLACES OF INTEREST.

A'keri, about six miles north-west of Vádi, formerly a fortified post of some consequence,¹ has a yearly fair on the 14th of *Mágh Vadya* (January-February), when about 5000 people assemble and drag a car, *rath*, round the temple. There is a quarry of hard purple or slate coloured stone much used for building. It has a post office.

A'mboli, about thirteen miles north-east of Vádi, is being much improved as a sanitarium. Two roads, one leading to the Rám pass and the other to Mahádevgad, have been made, a flourishing market is springing up, and a residence and stables for the Sar Desái, a school house, police station, rest-house, post office, and a large well are built or are under construction. When some more houses are ready, it is hoped that Ámboli will be a favourite sanitarium for Belgaum as well as for Sávantvádi.

A'vra Fort, about fifteen miles south-east of Vádi and about 300 yards north of the Vengurla road, built of stones and mud, was, in 1843, surrounded by a dry ditch overgrown with brushwood and bamboo.² On the north was an outwork connected with the fort by a very thick bamboo hedge on the east, and a wall on the west. There was a strong but poorly sheltered gateway. The fort was dismantled in 1845.

Ba'nda, on the right bank of the Terekhol near its mouth, about six miles south of Vádi and twenty from the sea, had, in 1872, 2126 people and 472 houses or 45 persons to each house. Up to Bándá the river is tidal, and navigable for boats of about 1½ tons (100 *mans*). Under the Bijápur kings (1489-1686), Bándá, then known as Ádilabad, was the chief town of a district, *subha*, under a minister, *vazir*. In the beginning of the sixteenth century (1514), it was a town of Moors and Gentiles, with merchants who dealt with traders from the Deccan and from the Malabár coast. Many ships from different quarters brought rice, coarse millet, and vegetables, and took away cocoanuts, spices, pepper, and other drugs to Diu, Aden, and Ormuz. There was also much export of goods and provisions from the interior.³ In 1538, Bándá was described as better and nobler, both from traffic and size, than Vengurla, admitting galleys at low tide.⁴ Nine years later (1547) it suffered much by a treaty between the Portuguese and the rulers of Vijayanagar, which provided that all

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Places of Interest.

ÁKERI.

ÁMBOLI.

ÁVRA FORT.

BÁNDÁ.

¹ It was unsuccessfully attacked by the Kolhápúr chief in 1783, and successfully defended by Phond Sávant III. in 1805.

² Bom. Gov. Sel. X. (New Series), 35, 36.

³ Stanley's Barbosa. 74.

⁴ DeCastro's *Primeiro Roteiro da Costa da Índia*, 221.

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Places of Interest.

BÁNDA.

Vijayanagar goods should be sent to Ankola and Honávar in the Kánara district instead of to Bánda, and that all horses imported by the Portuguese should go to Vijayanagar instead of to Bijápur.¹ In the seventeenth century (1638), it is described as strong and fairly large with very beautiful streets, and a great trade with the Portuguese in paper and European stuffs.² About thirty years later (1670), it was said to be a mighty city, two leagues from Goa and two from Vengurla, built near the Dery, *Terekh*, with broad streets, many fair buildings, and several temples.³ In 1804, when the feuds between Shrirám Sávant and Phond Sávant III. were at their height, Bánda was handed over to Chandroba, Shrirám Sávant's illegitimate son, who soon after (1817) became so powerful as to hold it successfully against the Vádi ruler. In 1826, it was a small port with 105 houses and five shops on a river navigable for large boats.⁴ At present (1880) it has about 100 shops and a Monday market, where cattle, cloth, and earthen vessels are sold. It has a well attended vernacular school, a post office, a custom house, and a travellers' rest-house.

Fort.

On a mound about seventy-five feet high, within musket range of the left bank of the Terekhol, stands a ruined irregular fortress built partly of good masonry and partly of loose stones and mud. Measuring 100 yards by fifty, it is built of roofed and loopholed towers joined by curtains. On the south-east angle is a gateway approached by an easy ascent and of no strength. On the west is a sallyport leading to the river by a flight of narrow steps. The fort is of no strength and has only a few unserviceable guns. In the fort are the sub-divisional revenue and magisterial offices.

Besides the fort there are the remains of some mosques, wells, and tombs. To the south of the river, built of laterite covered with cement, is the Jáma mosque measuring forty feet by eighteen. The walls are damaged and the roof is gone, but some handsome cornices and an entrance flight of steps remain. Outside the mosque is a cenotaph of Syed Abdul Kádir Jiláni, the Pirán-Pir or chief saint of Baghdád, where Muhammadan marriage parties usually come to pray.⁵ Close by is a pond, seventy-one feet by sixty, used for bathing purposes. Near it, in fairly good repair, is a travellers' home, *musáfarikhána*, a lofty octagonal tower with domed roof. The door posts are formed of solid blocks of stone. Inside there are traces of two tombs and some very neat laterite carving in the arches. The building is surrounded by a groin-roofed gallery 110 feet long and ten wide. About 150 yards further is another roofless and ruined mosque fifty-four feet by twenty-eight. It has two rows of octagonal plastered stone-pillars with carved capitals and fine tracery about the arches and windows. Outside the building is a pond, sixty-one feet by fifty, with twenty-four stone steps leading

¹ Col. de Men Ined. VII. 256.

² Ogilby's Atlas, V. 248.

³ This is doubtful. According to the local account Abdul Kádir was a Bijapur general,

⁴ Mandelslo, 215, 223.

⁵ Clune's Itinerary, 73.

to the water, and small cells all round. A few hundred yards further is the *Redi Gumháj* or buffalo mosque which has lately been restored. Besides the above there are many small tombs and ruins.

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Places of Interest.

Kinkeri, a village about six miles north-east of Vádi, has a yearly fair on the seventh of *Phálgun Shuddh* (March). At the fair time four men climb up a tall teakwood pillar, and the people standing round throw stones at them, but it is said, by the favour of the deity, none of them are ever hurt.

KINKERI.

Kudál, on the Karli, thirteen miles north of Sávantvádi had, in 1872, 2639 people and 445 houses or 6·9 persons to each house. Every Wednesday a market is held chiefly for cattle, fish, pottery, and vegetables. It is connected with Vádi, Málvan, and Vengurlá by a good road, and with Kolhápúr by the Phonda pass, and has a post office and a good Maráthi school. As far back as the sixth century (about 578), Kudál was the head-quarters of a branch of Chálukyás.¹ In the twelfth century it was the seat of a Maráthha baron, *Páligár*.² and continued to be the chief town of the district up to the Musalmán conquest (1500).³ Under the Bijápúr kings its Bráhma ruler was, with the title of Desái of Kudál, continued as the head of twelve sub-divisions, each governed by a *múik*.⁴ In modern times (1748) Kudál was the scene of a severe defeat of Tuláji Angria by Jayráam Sávant. And a few years later, Jayráam, quarrelling with his nephew Rámchandra Sávant (1737-1755) the Vádi chief, retired here and exercised independent authority. In 1804, in the dispute between Phond Sávant III. and Shrirám Sávant, the Kolhápúr chief, coming to Phond Sávant's help, seized Kudál and laid the country waste.

KUDAL.

On rising ground to the west of the town is a ruined fort of loose stone and mud, with bastions and connecting curtains. It is said to have been built or repaired by the Bijápúr kings. Irregular in shape it covers an area of about 160 square yards, and is encircled by a ditch. In the south-east corner are three gateways of no great strength, and on the west is a sallyport with a narrow ruined gateway. Its few guns of different sizes are all unserviceable. Within the fort are a ruined mosque, still sometimes used, and a fine cut masonry well called *ghoda búr*, forty feet deep and 100 round. It is called the horse's well, *ghoda búr*, because the path to the water is broad and slanting enough to allow a ridden horse to go down and drink. A building, finished in 1877, holds the sub-divisional revenue and judicial offices, and a detachment of police.

Fort.

Kupicha Dongar is an unfortified hill, about 1000 feet high, near the village of Valaval on the banks of the Karli river in Kudál. Its quarries yield good white granite.

KUPICHA
DONGAR.

Maha'devgad is a small weak fort, on an out-standing peak of the Sahyádris, about a mile and a half from Ámboli at the top of the Párpoli pass. In 1830 it was entered from the east by two narrow

MAHADEVGAD.

¹ Ind. Ant. VII. 161.² Jervis' Konkan, 81.³ Jervis' Konkan, 81.⁴ Bom. Gov. Sel. X. 154.

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MAHÁDEVGAD

gateways, flanked with three small towers and secured by wooden bars. The approaches to the entrance were narrow and difficult. Within gunshot of the fort, in an open space with some water, were two small hillocks which commanded the fort. At present (1880) the walls, which stood on the eastern side, have fallen down and fill the moat. There are no remains of any gateway or entrance to the fort. The ground inside has been turned into a meadow, and along a road from Ámboli carriages can be driven to the end of the spurs. From the top there is a fine view of the Konkan, and in clear weather the sea is seen at a distance of about thirty miles. The height is about 2500 feet and the space covered by the fort about twenty acres. In 1830, when taken by Lieutenant-Colonel Morgan, the approaches were for about a mile and a half defended by breast works of loose stones and wood, and inside were two small guns in fairly good order.¹

MANOHAR
FORT.

Manohar Fort, fourteen miles north-east of Vádi and on the south of the Ránga or Pra-iddhagad pass, is a solid mass of rock about 2500 feet high, joined to the Deccan by a narrow ridge about two miles long. It is said to have been fortified since the time of the Pándavs,² and in good hands is almost impregnable. Triangular in shape, 440 yards long by 350 broad, it has a single entrance approached by a flight of rock-cut steps and guarded by two gateways.

In the 1844 disturbances, the garrison, *gadkaris*, of the fort, numbering between 400 and 500 men, espoused the cause of the Kolhápúr insurgents.³ On the night of the 10th October, a band of them entered the house of the *sabnis* of Gothos, and burnt all his public and private papers. On the following night (11th October) a detachment of them, 200 strong, came out of the fort and attacked the detachment of the Sávantvádi Local Corps stationed at Dukánvádi. The attack was repulsed, and two days after (13th October) Major Benbow, with a detachment of the VIIth Regiment N. I., came from Vengurla to strengthen the Dukánvádi post. But with the aid of the Ránga garrison, the Manohar rebels attacked Dukánvádi, and placed the troops there in great peril. Reinforcements were pushed forward from Sávantvádi, and Colonel, afterwards Sir James, Outram, the Political Agent at Kolhápúr, taking the direction of military operations, pressed and harassed the rebels and destroyed their power in the open country. Still, for two months they continued to hold Manohar. About the close of the year 1844, Captain Popham, with three companies of the VIIth Regiment N. I., advancing against Manohar, attacked, and after a severe contest drove the enemy from a strongly stockaded post on Targol hill. After this defeat the insurgents abandoned the fort and it was taken (27th January) by General Delamotte. When the rebellion was quelled the fortress and its revenues were made over to Vádi. The garrison were allowed to keep their lands on certain conditions, but were declared to have forfeited all money claims:

¹ Lieut.-Col. T. Morgan, commanding XIVth Regt. N. I. (14th Dec. 1830)
² Clune's Itinerary, 78

³ See above, p. 445

and those who lived in Kolhápúr were forced to quit Vádi, and settle above the Sahyádris.

Masantosh, a small angular fort about fifteen acres in area, is an offshoot of, and about the same height as, the celebrated fort of Manohar, from which it is separated by a chasm 200 yards wide. Access is now almost impossible, as the old path, which must have had steps near the top, has completely disappeared.

Nerur, on the Karli river, three and a half miles west of Kudál, has a population of 4461 souls and 990 houses. Near the village are two ponds, the larger of which was, in 1877, examined with the view of enlarging it by replacing the earth embankment by a strong masonry dam. The idea had to be given up as the soil proved too weak to bear the weight of the masonry.

Pa't, a large garden village in the west of Kudál, ten miles north of Vengurla, and eighteen miles north-west of Vádi, has 2923 inhabitants and 859 houses, scattered over a large area, and including several hamlets, *ovúls*. It has a fine natural lake bordered by betelnut and palm groves, and is said during the rains to cover an area of about eighty-three acres. For many years its water has, during the cold season, been used to irrigate land in the neighbouring Ratnágiri villages of Mhápan and Kochra. There is an embankment with sluice gates on the north-east. Arrangements for repairing this embankment and building a new sluice gate have (1880) been made. In the village is a Maráthi school supported partly by the state and partly by the people.

Prasiddhgaḍ, or **Ra'ngna Fort**, on the Sávantvádi and Kolhápúr boundary, stands on a peak of the Sahyádris, about eighteen miles north of Mahádevgaḍ, and is 2600 feet high. Rángna was one of fifteen forts built by a chief of Panhála near Kolhápúr, who seems to have lived at the close of the twelfth century. In the beginning of the eighteenth (1709), Tarabái took refuge in the fort and was unsuccessfully besieged by Sháhu the grandson of Shiváji.¹

Sarambal, a village on the Karli about four miles north-west of Kudál, has 1500 inhabitants and 347 houses. It has a large lake covering an area of about seventy-two acres, whose water is used chiefly for field irrigation.

Sa'vantva'di, **Va'di**, or **Sundarva di**, that is the Beautiful Garden, in 15° 54' 15" north latitude and 73° 51' 36" east longitude, with, in 1872, a population of 8017 souls, stands 367 feet above the sea, about nineteen miles west of the base of the Sahyádris, and seventeen miles east of Vengurla. Founded by Phond Sávant in 1670, the town, almost buried in palm groves, stretches round the border of a lake, over rocky uneven ground seamed by ravines and water-courses. Well wooded hills rise on all sides, the highest, Vádi Peak on the west, rising 1200 feet above the sea. Of its 3017 inhabitants, 6364 (males 3169, females 3195) were Hindus,

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MANSANTOSH.

NERUR.

PAT.

PRASIDDHGAḌ.

SARAMBAL.

SÁVANTVÁDI.

Population.

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Places of Interest.

SÁVANTVÁDI
Trade.

873 (males 441, females 432) Musalmáns; 776 (males 354, females 422) native Christians; and four 'Others'.

Except on Saturdays, the market day, when numbers come in from the villages round, Vádi is a place of little trade. Besides the office of the police superintendent, *kotwál*, the market street or *bázár*, has an Anglo-vernacular school, a library, a post office, a vernacular school, and several upper-storied tile-roofed buildings, the houses of well-to-do traders. Sávantvádi manufactures are almost all ornamental. They are lacquered toys, *khushkas* grass fans, mats, boxes and baskets ornamented with beetle wings and gold embroidery, velvet and embroidered saddle-cloths, small tables and other ornaments of bison and buffalo horn, round and rectangular playing-cards, and pipe bowls of the inner shell of the cocoanut polished and inlaid with quicksilver.

Lake.

The lake, a beautiful sheet of water, hemmed in by well wooded hills and girt with a belt of palm, jack, and mango trees, is known as the Pearl Lake, *Moti Talab*. Covering about thirty-one acres, and with a mean depth of six feet, it was, in 1874, at a cost of about £2000 (Rs. 20,000), improved by replacing the old retaining dam by a cut-stone wall 204 yards long, secured by hydraulic cement, and with, at each end, iron gates worked by rack and pinion. On the north-west a long flight of steps leads to the water, and on the south-east and south-west are some rice fields watered from the lake. Besides for irrigation the water is used for bathing, cattle-drinking, and washing clothes.

Fort.

On the east shore of the lake, separated from it by a roadway and sloping bank, stands a ruined stone and mud fort, surrounded on the north-east and south by a ditch dry in the fair season. Irregular in shape, 350 yards by 150, and consisting of roofed loopholed towers and bastioned curtains, it has three entrances, the chief to the north, a gate of no great strength flanked by two towers. The fort contains two brass and some other guns all unserviceable. On the banks of the lake, an arched gateway, known as the *Mus*, or Slnice Gate, between two large circular towers, leads to an inner fortress whose walls stand on the brink of deep natural ravines. The entrance towers, with handsome castellated battlements, are being made into a post office, and the west face is to be furnished with a clock with a three feet dial. A block of buildings inside of the gateway, formerly used as a show place for wild beasts, now holds the offices of the Political Superintendent and his assistant. Close to these offices is a large quadrangular two-storied building, the eastern side taken up by a one-storied reception hall. The rest contains the offices of the manager *kamārisdār*, the secretary *daftardār*, the registrar, the judge *ayámdhish*, and the treasurer. To this square, a new front, with a clock tower over the central entrance gate, is being built at an estimated cost of 92200 (Rs. 22,000). Very near to this are the jail, the stable, and the palace. About 280 yards north of the fort are the homes of the Local Corps, with a range of huts, on rising ground, accommodating about 200 families.

South of the town and close to the lake stands a double-storied

building, now used as the Political Superintendent's residence. The station hospital, on a high airy site, an irregularly shaped red-stone building plastered with cement, with room for twenty-four patients, has out-offices, a small space in the front, and an enclosure behind with room for twelve female patients. As few people seek admission it is used by the sick of the Local Corps.

Though not surrounded by a wall, Vádi is fenced on most sides by ditches, ravines, stone walls, and bamboo thickets. Covering an area of about two miles, the town is divided into seven wards, *vádís*. On the south-east corner of the lake lies the *Sítai* or frankincense tree ward. East of the lake is the Private, *Khúsqil*, ward, where the personal servants of the Chief's family live. West of the *Khúsqil-váda* and north of the lake lies the *Sabnisváda* or head-clerk's ward. This, no longer used as a title, is still borne as a surname by a family, who, with their relations, hold a great part of this quarter. North-west of the *Sabnisváda* and beyond the outer fortification lies the *Bhatráda* or Bráhmans' quarter. West of the *Sabnisváda* lies the *Pánjar* or *Pánierráda*, the head-quarters of the native Christians, most of whom are masons. South-west of the *Pánjar-váda* lies the *Mátáráda*, containing the tombs of the chief's family, and to the south-east of the *Mátáráda* at the base of the hill, lies the *Junábázár*, the oldest part of the town, said to date from the time of Lakham Sávant (1641 - 1665).

Tulas, about thirteen miles west of Vádi on the Vengurla road, has, on the last day of *Vaishúkh* (May-June), a yearly fair in honour of Jaiti Parab, a village headman looked upon by the people as a saint. About 5000 persons assemble.

Va'gheri, a hill about five miles east of Vengurla, is a well known landmark for seamen. The height is about 1200 feet, and the area at the top about forty acres. There are no signs of fortification.

Va'la'val, a village about four miles west of Nerur and thirteen miles north of Vengurla, contains 507 houses and 2334 inhabitants. It has a large pond.

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SÁVANTVÁDI.

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